

**ANNUAL TRANSURANIC WASTE INVENTORY REPORT – 2007**

**DOE/TRU-2008-3379**

**Revision 1**

**This document supersedes DOE/TRU-2008-3379, Revision 0**



**U.S. Department of Energy  
Carlsbad Field Office**

**This document has been submitted as required to:**

**Office of Scientific and Technical Information  
PO Box 62  
Oak Ridge, TN 37831  
(865) 576-1188**

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**REVISION HISTORY**

|            |   |
|------------|---|
| Revision 0 | Initial Release   |
| Revision 1 | This revision is the result of the discovery of a calculation error based on the methodology used by LANL to report radionuclide activity concentration for their waste streams. The site provided their methodology for determination of radionuclide activity concentration, which was based on the concentration within the smallest applicable volume of a container in the waste stream. This resulted in an inordinately high activity concentration for the CH and RH waste streams because the same methodology was applied. Therefore, LANL recalculated activity concentrations for all of their waste streams based on the final form volume of the waste stream, which is incorporated into CID Data Version D.6.06 (LANL-CO 2008). |

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## 1.0 INTRODUCTION

### 1.1 Background and History

The U.S. Department of Energy's (DOE's) Waste Isolation Pilot Plant (WIPP) opened on March 26, 1999, becoming the nation's first deep geologic repository for the permanent disposal of defense-generated transuranic (TRU) waste. The WIPP Land Withdrawal Act (LWA) requires the U. S. Environmental Protection Agency (EPA) to periodically recertify WIPP's compliance with regulations published at Title 40 Code of Federal Regulations Part 191 (40 CFR 191) in accordance with criteria established at 40 CFR Part 194.<sup>1</sup> Under the LWA, five years after the initial receipt of TRU waste at WIPP and every five years thereafter, DOE must submit an application to EPA documenting continued compliance, and EPA must determine (i.e., recertify) that WIPP continues to comply with those regulations within six months of each application submission. DOE submitted the first recertification application, *Compliance Recertification Application 2004* (CRA-2004) (DOE 2004), to EPA in March 2004, and EPA recertified WIPP in March 2006.

The LWA defines TRU waste as "...waste containing more than 100 nanocuries of alpha-emitting transuranic isotopes per gram of waste, with half-lives greater than 20 years..."<sup>2</sup> TRU waste is classified as either contact-handled (CH) or remote-handled (RH), depending on the dose rate at the surface of the waste container. CH-TRU waste is packaged TRU waste with an external surface dose rate less than 200 millirem (mrem) per hour [rem: roentgen equivalent man], while RH-TRU waste is packaged TRU waste with an external surface dose rate of 200 mrem or greater per hour, as defined in the LWA. Unless otherwise indicated, for the purpose of this report, all references to TRU waste include TRU waste and mixed TRU waste (waste that contains both radioactive and hazardous components, as defined in the Atomic Energy Act of 1954, 42 USC § 2011 *et seq.* (U.S. Congress 1954), and the Resource Conservation and Recovery Act (RCRA), 42 USC § 66901 *et seq.*

For the preparation of the CRA-2004, a detailed TRU waste inventory update was conducted. The detailed information required for performance assessment (PA) modeling calculations, which are needed for recertification, includes volumes (currently stored, emplaced, and projected), radionuclides in the waste and their activity concentrations, and the densities of the waste material parameters (WMPs) in the waste. The TRU waste inventory changed dramatically between the initial certification of WIPP and the CRA-2004. For that reason, the TRU waste inventory will be updated annually, beginning with the *Annual Transuranic Waste Inventory Report – 2007* (hereafter referred to as "this report"). DOE TRU waste generation has occurred at 27 sites across the country – six large and 21 small quantity sites. Six of these sites have emplaced their waste at WIPP, found other disposition pathways for the waste, or have

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<sup>1</sup> See Pub. L. No. 102-579, § 8, 106 Stat. 4777, 4786-4788 (U.S. Congress 1992), as amended, Waste Isolation Pilot Plant Land Withdrawal Act Amendments, Pub. L. No. 104-201, § 3187, 110 Stat. 2422, 2852 (U.S. Congress 1996).

<sup>2</sup> The term transuranic waste "...means waste containing more than 100 nanocuries of alpha-emitting transuranic isotopes with half-lives greater than twenty years, per gram of waste, except for: (1) High-level radioactive wastes; (2) wastes that the Department [of Energy] has determined, with the concurrence of the Administrator [of the Environmental Protection Agency], do not need the degree of isolation required by this part; or (3) wastes that the [Nuclear Regulatory] Commission has approved for disposal on a case-by-case basis in accordance with 10 CFR Part 61" (40 CFR 191.02 (i); EPA 1993).

transferred their waste to other sites for further disposition. The remaining TRU waste is currently retrievably stored at 21 sites, six of which are potential TRU waste sites (see Figure 1 and Section 4.2 for potential waste categories). The inventory data cut-off date for this report was December 31, 2006, with limited changes for selected waste streams through May 2008. From WIPP's opening on March 26, 1999, through December 31, 2006, 5,347 shipments of CH-TRU waste were safely characterized, transported, and disposed in WIPP (Moody 2007a).

For improvement of the data collection process, the inventory team used an internal checklist containing a series of data checks and sources of changes. This checklist was used for TRU waste inventory data screening after receipt of a TRU waste site's data submittal. The inventory team contacted the sites with questions if any of the data checks and sources of changes were questioned. Data checks included:

- Challenged radionuclide inputs if only one fission product was reported or only one radionuclide in secular equilibrium with another was reported
- Distributed radionuclides with specific codes (e.g., Pu-52 and mixed fission products (MFPs))
- Checks to ensure no waste stream was reported greater than 23,000 curies per cubic meter ( $\text{Ci}/\text{m}^3$ )
- Checks to ensure that if cement was reported in a comments field, it was reported as a waste material parameter in kilograms per cubic meter ( $\text{kg}/\text{m}^3$ )
- If prohibited hazardous waste numbers were reported, the TRU waste site was required to identify the type of treatment that would be applied to make the waste shippable to WIPP.

For further improvement, additional data checks will be added for complexing agents (chelating agents) and oxyanions when checking a TRU waste site's data submittal for the *Annual Transuranic Waste Inventory Report—2008*.

The DOE must demonstrate compliance with all applicable regulations for the permanent disposal of TRU defense waste in the WIPP repository. These regulations are the environmental standards for management and disposal of TRU defense waste, as mandated in 40 CFR Parts 191 and 194, and RCRA regulations, where the New Mexico Environment Department has primacy. Compliance demonstration through PA modeling calculations for certification and recertification is based on the estimated inventory of emplaced, stored, and projected waste streams compiled in TRU waste inventory reports. Thus, the best available estimated inventory is needed.

The *WIPP TRU Waste Baseline Inventory Report (WTWBIR)*, Revision 0 (DOE 1994) and Revision 1 (DOE 1995a), provided the first set of data to be included in PA modeling calculations. The *Transuranic Waste Baseline Inventory Report (TWBIR)*, Revision 2 (DOE 1995b), expanded the original purpose of Revisions 0 and 1 by providing an estimate of the total DOE TRU waste inventory in order to meet LWA requirements, including non-defense, commercial, polychlorinated biphenyl-contaminated, and buried (predominately pre-1970) TRU wastes that were not planned at the time for disposal in WIPP. Since that time, Idaho National Engineering and Environmental Laboratory (INEEL) (now the Idaho National Laboratory [INL])



has begun preparations to ship pre-1970 buried waste to WIPP, as mandated by a federal district court order.<sup>3</sup>

The TWBIR, Revision 3 (DOE 1996a), was based on TWBIR Revision 2 data supplemented by data in several memoranda issued during early calendar year (CY) 1996. These memoranda summarize additional data requested from the DOE TRU waste sites to support PA modeling calculations used in the development of the WIPP *Compliance Certification Application (CCA)* (DOE 1996b). The supplemental information was generated from specific data requests after the publication of Revision 2, and the data were published in appendices in Revision 3. The supplemental data of Revision 3 included estimates for complexing agents, oxyanions, and cement content in solidified waste.

Knowing that waste inventory information is subject to change as a result of characterization activities, improved estimation processes, emplacement of waste in WIPP, and ongoing generation activities, the EPA requested that an update to the CCA inventory be included in the CRA-2004 inventory (Appendix DATA, Attachment F). The *Transuranic Waste Baseline Inventory Report - 2004 (TWBIR-2004)* (DOE 2006b) was a revision of Appendix DATA, Attachment F. This update was provided for the Performance Assessment Baseline Calculation (PABC; Leigh et al. 2005a; Leigh et al. 2005b) as requested by EPA to support their completeness review and approval process (Cotsworth 2005).

This revision is the result of the discovery of a calculation error based on the methodology used by Los Alamos National Laboratory (LANL) to report radionuclide activity concentration for their waste streams. The site provided their methodology for determination of radionuclide activity concentration which was based on the concentration within the smallest applicable volume of a container in the waste stream. As an example, if Pu-238 was disposed in 1-gallon paint cans, the concentration (in Ci/m<sup>3</sup>) was calculated by the summing the activity for Pu-238 and dividing by the volume of the 1-gallon paint cans in which it was found. This resulted in an inordinately high activity concentration for the CH- and RH- waste streams because the same methodology was applied to all LANL waste streams. Therefore, LANL recalculated activity concentrations for all of their waste streams based on the final form volume of the entire waste stream.

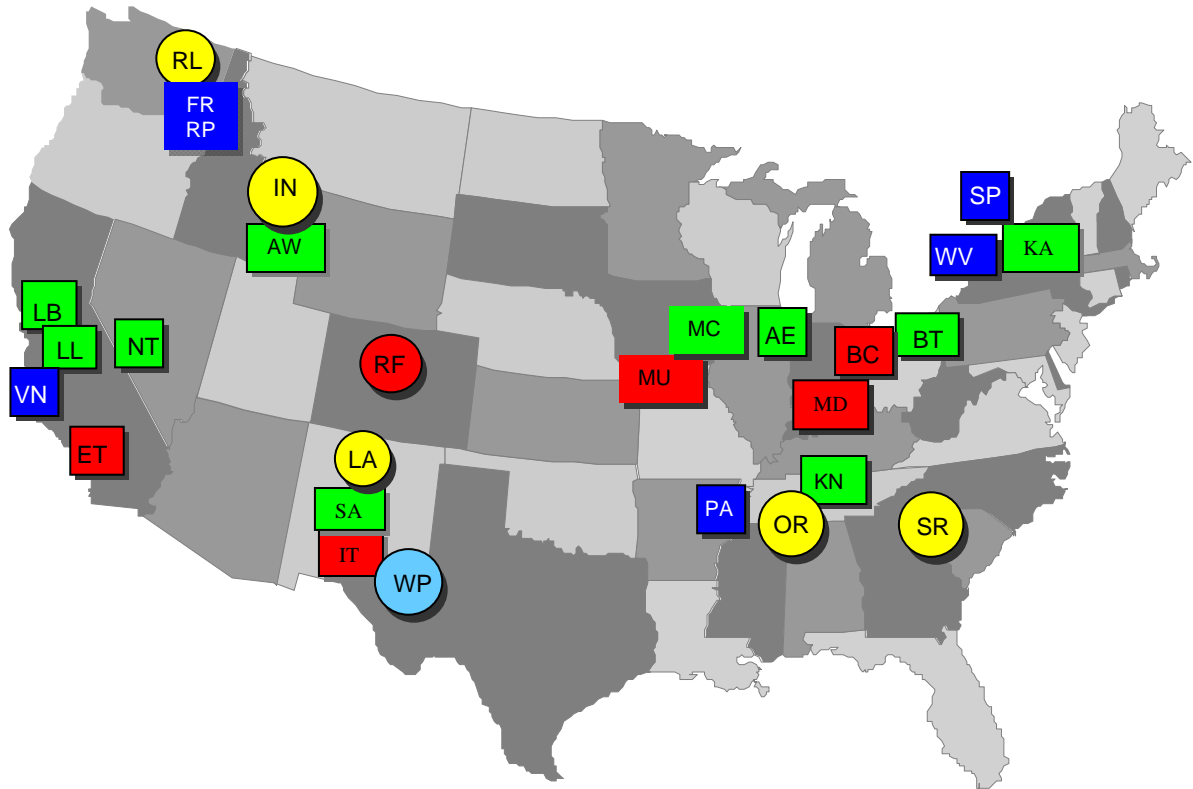
This report contains the relevant information needed to perform PA modeling calculations, as well as information that can be used by DOE Carlsbad Field Office (CBFO) management at WIPP for planning purposes. This information is maintained in the *Comprehensive Inventory Database [CID] Version 1.00 Schema Version 1.00, Data Version D.6.06* (hereafter referred to as CID Data Version D.6.06) (LANL-CO 2008). The CID database is qualified by the CBFO *Quality Assurance Program Document (QAPD)* (DOE 2007). This report and the CID will be updated annually to identify changes that may affect the performance of the WIPP repository and will allow better tracking of the TRU waste inventory over time (for a detailed summary of inventory changes reported this year see Appendix D).

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<sup>3</sup>Public Serv. Co. v. Kempthorne, 2006 U.S. Dist. LEXIS 34584 (D. Idaho May 25, 2006) (under rules of contract interpretation, the 1995 agreement between the U.S. Department of Energy and the State of Idaho requires the Department to remove transuranic waste in a subsurface disposal area as well as in an above ground storage area at the Department's Idaho facility by 2018).

The methodology used to collect information from the DOE TRU waste sites and enter it into the CID is captured in the following Los Alamos National Laboratory-Carlsbad Operations (LANL-CO) procedures: INV-SP-01, *Data Collection, Data Management and Control for the Comprehensive Inventory* (LANL-CO 2007b), and INV-SP-02, *Entry, Verification and Validation of Inventory Information in the Comprehensive Inventory Database* (LANL-CO 2007c).

This work was performed under the LANL-CO Quality Assurance (QA) Program. The LANL-CO QA Program is fully compliant with the requirements set forth in the CBFO QAPD. The processes used by the LANL-CO TRU Waste Inventory Team to collect, maintain, and report inventory information are graded and implemented to NQA-1 standards under the LANL-CO QA Program. This includes the software QA procedures used to qualify the CID and other software used to analyze TRU waste inventory information. LANL-CO software QA is documented in LCO-QPD-02, *Software Quality Assurance Plan* (LANL-CO 2007d), and LCO-QP19-1, *Software Quality Assurance* (LANL-CO 2007e).



Yellow – Large Quantity Site    Green – Small Quantity Site    Red – Sites that are de-inventoried of TRU waste    Blue – Potential TRU Waste Site

- AE      Argonne National Laboratory
- AW      Material and Fuels Complex (MFC)
- BC      Battelle Columbus Laboratories (BCL)—shipped to RL and SR
- BT      Bettis Atomic Power Laboratory (BAPL)
- ET      Energy Technology Engineering Center—shipped to RL
- FR      Framatome (AREVA) (Potential)
- IN      Idaho National Laboratory
- IT      Inhalation Toxicology Research Institute (ITRI) (known as Lovelace Respiratory Research Institute) - shipped to SA
- KA      Knolls Atomic Power Laboratory
- KN      Knolls Atomic Power Laboratory-Nuclear Fuels Services
- LA      Los Alamos National Laboratory
- LB      Lawrence Berkeley Laboratory (LBL)
- LL      Lawrence Livermore National Laboratory (LLNL)
- MC      U.S. Army Materiel Command (USAMC)
- MD      Mound Plant – shipped to SR
- MU      University of Missouri Research Reactor—shipped to AE, then to WIPP
- NT      Nevada Test Site (NTS)
- OR      Oak Ridge National Laboratory
- PA      Paducah Gaseous Diffusion Plant (Potential)
- RF      Rocky Flats Environmental Technology Site—shipped to WIPP
- RL      Hanford Site (Richland Operations Office)
- RP      Hanford Site (Office of River Protection) (Potential)
- SA      Sandia National Laboratories
- SP      Separations Process Research Unit (Potential)
- SR      Savannah River Site (SRS)
- VN      General Electric Vallecitos Nuclear Center (Potential)
- WV      West Valley Demonstration Project (Potential)
- WP      Waste Isolation Pilot Plant

**FIGURE 1. U.S. DEPARTMENT OF ENERGY TRU WASTE SITES**

## 1.2 Sources of Transuranic Waste Information

This report includes information taken from the TWBIR, Revisions 2 and 3, the WIPP Waste Information System (WWIS) database, the TWBIR-2004, Acceptable Knowledge (AK), and updated information provided by the DOE TRU waste sites. The TWBIR, Revision 2, and Revision 3 (which used the same data as Revision 2 plus supplemental data needed for CCA PA modeling calculations) provide historical information. The WWIS provides characterization information on the emplaced portion of the TRU waste inventory. The TWBIR-2004 provided TRU waste inventory information for the CRA-2004 and was the “starting point” for the DOE TRU waste sites to update information for this report.

The WIPP has been open and receiving waste since March 1999; therefore, characterization data for the emplaced waste (45,657 m<sup>3</sup>) through December 31, 2006, as obtained from the WWIS, are included in this report. In addition to updates from TRU waste sites, information obtained from approved site-specific AK summary reports has been incorporated to provide the most current information on waste streams being characterized and shipped to WIPP. Site visits and onsite interviews facilitated data collection, and site validation of data in the CID ensured accurate representation of data.

Since the issuance of TWBIR-2004, improvements in this report include: use of robust data collection and data management, implementation of LANL-CO QA and records management procedures, connection of site data submittals and records directly to the CID, and maintenance of site inventory records in one location. These improvements, along with ongoing efforts to standardize data development, tracking, and validation, have greatly improved the current inventory and will result in fewer changes for future annual updates.

## 1.3 Information Used in WIPP Performance Assessment

For PA modeling calculations, the Sandia National Laboratories-Carlsbad Program Group (SNL-CPG) (Dunagan 2007) has requested the following data:

- Waste stream volumes (in m<sup>3</sup>).
- Inventory of radionuclides on a waste stream basis for both CH- and RH-TRU waste, as curies and decayed to the years 2033, 2133, 2383, 3033, 7033, and 12033.
  - For waste stream-level inventories, the following are needed: <sup>241</sup>Am, <sup>243</sup>Am, <sup>244</sup>Cm, <sup>137</sup>Cs, <sup>237</sup>Np, <sup>238</sup>Pu, <sup>239</sup>Pu, <sup>240</sup>Pu, <sup>241</sup>Pu, <sup>242</sup>Pu, <sup>244</sup>Pu, <sup>90</sup>Sr, <sup>229</sup>Th, <sup>230</sup>Th, <sup>232</sup>Th, <sup>233</sup>U, <sup>234</sup>U, <sup>235</sup>U, <sup>236</sup>U, and <sup>238</sup>U
  - For WIPP-scale inventories, the following are needed: <sup>227</sup>Ac, <sup>241</sup>Am, <sup>243</sup>Am, <sup>14</sup>C, <sup>249</sup>Cf, <sup>251</sup>Cf, <sup>252</sup>Cf, <sup>243</sup>Cm, <sup>244</sup>Cm, <sup>245</sup>Cm, <sup>246</sup>Cm, <sup>247</sup>Cm, <sup>248</sup>Cm, <sup>250</sup>Cm, <sup>135</sup>Cs, <sup>137</sup>Cs, <sup>129</sup>I, <sup>59</sup>Ni, <sup>63</sup>Ni, <sup>237</sup>Np, <sup>231</sup>Pa, <sup>210</sup>Pb, <sup>107</sup>Pd, <sup>147</sup>Pm, <sup>238</sup>Pu, <sup>239</sup>Pu, <sup>240</sup>Pu, <sup>241</sup>Pu, <sup>242</sup>Pu, <sup>244</sup>Pu, <sup>226</sup>Ra, <sup>79</sup>Se, <sup>147</sup>Sm, <sup>151</sup>Sm, <sup>121m</sup>Sn, <sup>126</sup>Sn, <sup>90</sup>Sr, <sup>99</sup>Tc, <sup>229</sup>Th, <sup>230</sup>Th, <sup>232</sup>Th, <sup>232</sup>U, <sup>233</sup>U, <sup>234</sup>U, <sup>235</sup>U, <sup>236</sup>U, <sup>238</sup>U, and <sup>93</sup>Zr
- Inventory of all non-radioactive WMPs that were previously tracked on a waste stream basis for both CH- and RH-TRU waste. The WMPs include: iron-based metal/alloy,

aluminum-based metal/alloy, other metal/alloys, other inorganic materials, vitrified materials, cellulosic, plastic, and rubber (CPR) material, solidified inorganic material, solidified organic material, cements, soils, steel from packaging, plastic/liners from packaging, and lead from RH-TRU waste packaging. All non-radioactive WMPs are reported in average densities ( $\text{kg}/\text{m}^3$ ) except for cements, which are also reported as masses (kg).

- Inventory of any other non-radioactive waste materials that are discovered to account for a significant portion (greater than 5 percent by weight or volume) of a waste stream as a result of changes to the inventory.
- Inventory of CPR and other biodegradable materials used to facilitate emplacement of waste and magnesium oxide ( $\text{MgO}$ ) in WIPP, supplied as average densities ( $\text{kg}/\text{m}^3$ ) for both CH- and RH-TRU waste.
- Inventory of organic complexing agents and oxyanions (sulfate, nitrate, and phosphate) reported in masses (kg).
- Waste-stream-level inventories of radionuclides and non-radioactive WMPs for emplaced waste.

#### **1.4 Other Uses of Transuranic Waste Inventory Information**

In addition to providing TRU waste inventory information for PA modeling calculations, the CID was also developed to be used for other purposes. For planning purposes, CBFO management at WIPP needs TRU waste inventory information for waste that has already been generated and is stored in both “currently stored” and “final form” (compliantly packaged and intended for shipment to WIPP) configurations at the DOE TRU waste sites and for waste that will be generated by the sites (projected waste). Specifically, CBFO management will use TRU waste inventory information to plan waste retrieval, treatment, repackaging, characterization, shipment, and disposal for both stored and projected wastes. Site-specific work plans, which detail approaches for moving TRU waste to WIPP, have been developed and are continually updated using TRU waste inventory information.

Other technical uses for the TRU waste inventory include availability of information for activities such as National Environmental Policy Act (NEPA) analyses and to support the development of new containers or shipping packages.

## 2.0 METHODOLOGY

This report provides information that was collected from the DOE TRU waste sites beginning with a DOE request (Patterson 2006) for the sites to update the data provided for the TWBIR-2004. This report was generated under the LANL-CO QA Program, which was developed to support the DOE CBFO National TRU Program. The LANL-CO TRU waste inventory team completed the following steps in order to generate this report:

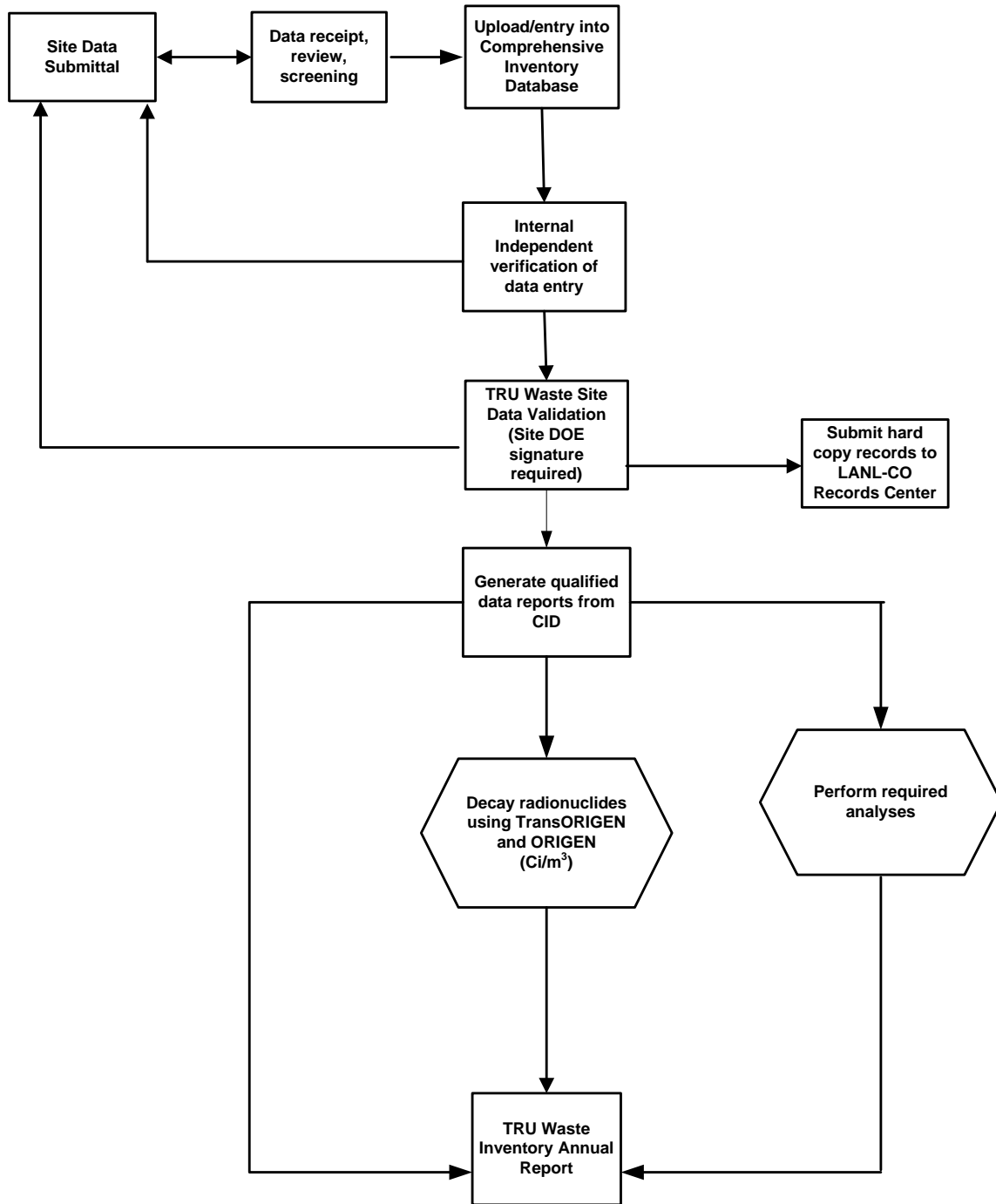
1. Collected TRU waste stream information from the DOE TRU waste sites via site visits and additional communication, as needed.
2. Entered the updated information into the CID.
3. Performed necessary analyses of the information to report data that are required for PAs, in accordance with LCO-QP9-1, *Analyses* (LANL-CO 2005).
4. Generated fully qualified data tables and associated fields from the CID.
5. Submitted the above results as official WIPP records acceptable for use in PA modeling calculations, in accordance with LCO-QP17-1, *Record Management* (LANL-CO 2007a).

The following sections describe the three basic process steps leading to the issuance of this report. Section 2.1 discusses collection, compilation, verification, and validation of TRU waste inventory information. Section 2.2 describes preparation of the TRU waste disposal inventory. Section 2.3 describes the analyses that were completed to support this report.

### 2.1 Collection, Compilation, Verification, and Validation of Inventory Information

For purposes of the second recertification, CRA-2009, the EPA has been concerned with changes in the TRU waste inventory since the CRA-2004. Therefore, each DOE TRU waste site was sent their TRU waste inventory information from the TWBIR-2004, which supported the CRA-2004. The information was entered into a Microsoft™ Excel spreadsheet (template) that contained fields found in the CID. The sites were requested to update any existing information and add information in the new fields.

The TRU waste inventory team visited all of the large quantity sites and several of the small quantity sites to assist them in completing the template. After the templates were completed, the team checked the templates for accuracy and consistency in accordance with INV-SP-01, *Data Collection, Data Management and Control for the Comprehensive Inventory* (LANL-CO 2007b). If discrepancies were found, they were corrected in accordance with INV-SP-02, *Entry, Verification and Validation of Inventory Information in the Comprehensive Inventory Database* (LANL-CO 2007c). The TRU waste inventory information was then uploaded into the CID and verified by an inventory team member who had not been involved in the upload. After this internal, independent verification, validation reports were prepared and sent to the DOE TRU waste site managers. A letter signed by each site manager documented validation of the information in the database. Hard copies of the information and signed letters were then submitted to the LANL-CO Record Center (see Figure 2 for a flow chart of the TRU waste inventory process) in accordance with LCO-QP17-1, *Record Management* (LANL-CO 2007a).



**FIGURE 2. TRU WASTE INVENTORY PROCESS FLOWCHART**

## 2.2 Preparation of the Transuranic Waste Disposal Inventory

Data tables included in this report were generated by the CID; the new database developed using Microsoft™ Access Data Project™ (ADP) technology with a Microsoft SQL [structured query language] Server™ back end. ADP technology allows multiple users to run “front-end” clients while simultaneously accessing a common data store, which is a database running on a Microsoft

SQL Server® 2000 platform. ADP differs from the traditional distributed Microsoft Access database (MDB) solution in that it is a specific file type that stores user objects – such as forms, reports, macros, and Visual Basic for Applications code modules – while all the other objects – tables, stored procedures, user-defined functions, and views – are stored on the database server. This allows for more efficient data storage and utility. An SQL server makes the use of real-time CID data more scalable than it would be in a traditional MDB file.

The CID was used to manage, maintain, and perform calculations on the inventory data, which were then used to generate qualified data reports and tables. The following sections describe how the data were prepared for this report.

### 2.2.1 Volume and Scaling Calculations

PAs conducted in support of WIPP have been predicated on the assumption that the WIPP repository would be filled to its design capacity at the time of closure. The design capacity for WIPP is 175,564 m<sup>3</sup> (6,200,000 ft<sup>3</sup>), as set by the LWA, with a limit of 7079 m<sup>3</sup> (250,000 ft<sup>3</sup>) for RH-TRU waste as imposed by the Consultation and Cooperation Agreement (C&C Agreement) (DOE and State of New Mexico 1988); therefore, the difference in the design capacity and the RH-TRU limit sets the CH-TRU disposal limit at 168,485 m<sup>3</sup> (5,950,000 ft<sup>3</sup>). The volume of anticipated (stored plus projected) and emplaced TRU waste reported by the DOE TRU waste sites in support of this report is less than the design capacity for WIPP. Therefore, scaling the TRU waste volumes to the design capacity for each in WIPP is necessary for PA (scaling is also applied to the radionuclides, chemical components, and CPR). The *scaled* inventory for PA is referred to as the TRU waste “disposal” volume. Scaling is performed only on projected waste. The roll-up and scaling calculations performed in support of this report were performed in the CID.

The waste stream volumes were derived by summing the waste-stream-level data into a site-level roll-up. For each DOE TRU waste site, all stored waste stream volumes ( $v_s$ ) were summed to arrive at the total stored volume for the site,  $V_s$ . All projected waste stream volumes ( $v_p$ ) were summed to arrive at the total projected volume for the site,  $V_p$ . The sum of the total stored volume and the total projected volume is the total anticipated volume,  $V_a$  (see equation 1):

$$V_a = V_s + V_p \quad (1)$$

where

$V_a$  is the total anticipated volume  
 $V_s$  is the total stored volume  
 $V_p$  is the total projected volume

Since the total reported volume of CH-TRU waste is less than the WIPP disposal limit of 168,485 m<sup>3</sup> (5,950,000 ft<sup>3</sup>), the projected volume was scaled so the total volume equaled the CH-TRU waste disposal limit for WIPP. The scaling factor for CH-TRU waste was calculated using equation 2 applied to the WIPP waste streams:

$$SF_{CH} = (\text{CH TRU Disposal Limit in m}^3 - (V_s + V_e))/V_p \quad (2)$$

where



- $SF_{CH}$  is the scaling factor for the CH-TRU waste volume  
 $V_s$  is the total stored volume over all waste streams and all sites for CH-TRU waste  
 $V_e$  is the total emplaced volume for CH-TRU waste over all waste streams and all sites as of December 31, 2006  
 $V_p$  is the total projected volume over all waste streams and all sites for CH-TRU waste

The disposal inventory for a single CH-TRU waste stream was obtained by multiplying the CH-TRU waste projected volume by the CH-TRU waste scaling factor and adding that value to the stored and emplaced volumes for each waste stream, as shown in equation 3:

$$V_{CH-Disposal} = SF_{CH} (v_p) + v_s + v_e \quad (3)$$

where

- $V_{CH-Disposal}$  is the disposal volume for CH-TRU waste for a single waste stream  
 $SF_{CH}$  is the scaling factor for the CH-TRU waste volume  
 $v_p$  is the projected inventory volume for a single CH-TRU waste stream before scaling  
 $v_s$  is the stored inventory volume for a single CH-TRU waste stream  
 $v_e$  is the emplaced inventory volume for a single CH-TRU waste stream

The scaling factor for RH-TRU waste is calculated in the same manner as the CH-TRU waste scaling factor using RH-TRU waste inventory volumes and the allowed RH-TRU waste capacity.

The total disposal inventory for the WIPP repository is the sum of the disposal volumes for CH- and RH-TRU waste for all waste streams after scaling ( $V_{CH-Disposal}$  and  $V_{RH-Disposal}$ ).

Table 2-1 shows the calculation results for the CH- and RH-TRU waste scaling factors for this report based on the unscaled inventory volumes presented in Tables 3.1 and 3.2, respectively. The total CH-TRU waste disposal inventory,  $V_{CH-Disposal}$ , is the sum of the scaled CH-TRU waste stream volumes. The disposal waste stream volumes for the CH- and RH-TRU waste streams included in the estimate of volume for PA are given in Appendix E.

**Table 2-1. Volume Scaling Factors**

| <b>Contact-Handled Waste</b>                      |                         |
|---|-------------------------|
| WIPP Capacity for CH Waste                        | 1.68E+05 m <sup>3</sup> |
| Total Stored CH Volume (V <sub>s</sub> )          | 9.99E+04 m <sup>3</sup> |
| Total Projected CH Volume (V <sub>p</sub> )       | 2.96E+03 m <sup>3</sup> |
| Total Emplaced CH Volume (V <sub>e</sub> )        | 4.57E+04 m <sup>3</sup> |
| <b>CH Volume Scaling Factor (SF<sub>CH</sub>)</b> | <b>7.74E+00</b>         |
| <b>Remote-Handled Waste</b>                       |                         |
| WIPP Capacity for RH Waste                        | 7.08E+03 m <sup>3</sup> |
| Total Stored RH Volume (V <sub>s</sub> )          | 2.67E+03 m <sup>3</sup> |
| Total Projected RH Volume (V <sub>p</sub> )       | 6.72E+02 m <sup>3</sup> |
| Total Emplaced RH Volume (V <sub>e</sub> )        | 0.00E+00 m <sup>3</sup> |
| <b>RH Volume Scaling Factor (SF<sub>RH</sub>)</b> | <b>6.56E+00</b>         |

Data Source: CID Data Version D.6.06, LANL-CO 2008.

NOTE: Actual numerical values have been rounded for presentation purposes.

These CH and RH scaling factors are larger than the scaling factors reported for TWBIR 2004 (see Appendix D for comparisons) mainly due to the re-categorization (moved from WIPP Bound Waste to Potential TRU Waste; Moody 2007b) of all the waste streams from the Hanford Office of River Protection and the sodium-bearing waste streams from INL.

### **2.2.2 Waste Material Calculations**

The DOE has many reasons for obtaining and tracking non-radiological information about the TRU waste inventory destined for WIPP. For example, the DOE tracks the waste materials that go into the WIPP repository (i.e., CPR) because they may affect gas generation in the repository (Dunagan 2007). In addition, the DOE needs to know the non-radiological properties of the waste not only for PA purposes, but also to support safe transportation of TRU waste and operation of the WIPP facility.

As part of the data call for this report, the DOE TRU waste sites were asked to update the information about the materials contained in the waste. For each waste stream, they were asked to revisit the final waste forms and to update, if necessary, the density of each of the WMPs for the waste stream.

Waste streams were sometimes comprised of more than one container type (e.g., 55-gallon drums and standard waste boxes [SWBs]). In these instances, when the DOE TRU waste site provided only one set of WMPs, those WMPs were used for both container types, except for the packaging material parameters, which were corrected for the container type using the packaging densities given in section 3.2.2. The CID contains the WMP list for every container type in a waste stream. However, the waste profiles in Appendices A and C (WIPP-bound and potential TRU waste, respectively) have a weighted average of the WMPs for all container types used in a waste stream. If the site provided a WMP list for each container type, those lists were

maintained in the CID and a weighted average of the WMPs for all container types was used in the waste profiles.

### 2.2.2.1 Waste Isolation Pilot Plant-Average Waste Material Parameter Densities

PAs conducted in support of WIPP have been predicated on the assumption that waste materials are distributed homogeneously throughout the WIPP repository. As a result, a WIPP average value for waste material densities is needed for PA.

The roll-up of WMP average densities required combining data from all of the WIPP TRU waste streams reported by the DOE TRU waste sites. A weighted average value for the WMP based on the individual waste stream volumes in the total inventory was calculated in the CID from the WMP average densities provided by the sites as shown in equations 4, 5, and 6:

$${}^{WM}m_i = {}^{WM}p_i \cdot v_i \quad (4)$$

$${}^{WM}M = \sum {}^{WM}m_i \quad (5)$$

$${}^{WM}P = {}^{WM}M / V \quad (6)$$

where

- ${}^{WM}m_i$  is the mass of the waste material (WM) in waste stream i
- ${}^{WM}p_i$  is the average density of the WM in waste stream i
- $v_i$  is the actual (not scaled) volume of waste stream i (stored + projected + emplaced)
- ${}^{WM}M$  is the total mass of WM in all WIPP-bound waste streams
- ${}^{WM}P$  is the average density of the WM in all (stored + projected + emplaced) WIPP-bound waste streams
- $V$  is the actual (not scaled) volume of all (stored + projected + emplaced) WIPP-bound waste streams

### 2.2.3 Radionuclide Calculations

The DOE TRU waste sites were asked to update information about the radiological components in the waste they intend to ship to WIPP. For each waste stream, they were asked to update the radionuclide activity concentrations (in Ci/m<sup>3</sup>) and to provide the generation or last assay date for each waste stream.

The radionuclide data provided by the DOE TRU waste sites consisted of radionuclide activity concentrations at the date of assay (if the waste stream was assayed) or at the date that the site calculated the activity concentrations. For PA purposes, all radionuclides reported by waste stream must be decayed to a common time frame to facilitate comparison of data (Dunagan 2007). Therefore, all radionuclide data provided in this report in Appendices A, B, and C were decay-corrected to the common base year of CY 2006 (December 31, 2006).

The radionuclide activity concentrations reported by the DOE TRU waste sites were exported from the CID into an external application, Oak Ridge National Laboratory (ORNL) Radiation Safety Information Computational Center *RSICC Computer Code Collection: ORIGEN 2.2, Isotope Generation and Depletion Code Matrix Exponential Method* (ORNL 2002), where the radionuclide decay calculations were performed, and then imported back into the CID. ORIGEN

2.2 uses a matrix exponential method to solve a large system of coupled, linear, first-order ordinary differential equations with constant coefficients. ORIGEN 2.2 has been qualified under the LANL-CO QA Program using LCO-QP19-1, *Software Quality Assurance* (LANL 2007e). A separate analysis describing the use of TransOrigen.xls, a pre- and post-processor Excel workbook application for ORIGEN 2.2, is used to qualify data uploads and unit conversion. This workbook provides a user-friendly interface to process TRU waste stream data from ORIGEN 2.2 by facilitating the creation of input files and post-processing the output files (Van Soest 2008b).

Scaled waste stream volumes were used to calculate waste stream radionuclide activity from the decayed ORIGEN 2.2 radionuclide activity concentrations as shown in equation 7 and are presented in Appendix E for seven decay scenarios:

$$a(RN)_{Disposal} = \alpha(RN) \cdot v_{Disposal} \quad (7)$$

where

|                    |   |
|--------------------|---|
| $a(RN)_{Disposal}$ | is the activity of the radionuclide RN in the scaled waste stream volume                                    |
| $\alpha(RN)$       | is the decayed radionuclide activity concentration in Ci/m <sup>3</sup> from ORIGEN 2.2 for radionuclide RN |
| $v_{Disposal}$     | is the scaled waste stream disposal volume (see section 2.2.1) for CH- or RH-TRU waste                      |

The WIPP disposal (see section 3.4 for discussion on WIPP-level roll-up scaling) radionuclide activities were calculated as shown in equations 8 and 9 for both CH- and RH-TRU waste, respectively. In the first step, the activities of each radionuclide in the scaled waste stream volumes ( $a(RN)_{Disposal}$ ) are summed for all TRU waste streams to give the total activity for each radionuclide in CH- and RH-TRU waste in the WIPP repository. In the second step, the total activity for each radionuclide in CH- and RH-TRU waste in the repository is divided by the volume limit (168,485 m<sup>3</sup> [5,950,000 ft<sup>3</sup>] for CH-TRU waste and 7,079 m<sup>3</sup> [250,000 ft<sup>3</sup>] for RH-TRU waste) to give the activity concentration for a radionuclide in CH- or RH-TRU waste in the repository.

$$A(RN) = \Sigma a(RN)_{Disposal} \quad (8)$$

$$\hat{A}(RN) = A(RN)/Limit \quad (9)$$

where

|                    |  |
|--------------------|--|
| $A(RN)$            | is the total activity (Ci) for a radionuclide in CH- or RH-TRU waste in the repository (after scaling)                                       |
| $a(RN)_{Disposal}$ | is the activity (Ci) of the radionuclide RN in the scaled waste stream volume  |
| $\hat{A}(RN)$      | is the activity concentration for a radionuclide in CH- or RH-TRU waste in the repository (Ci/m <sup>3</sup> )                               |
| $Limit$            | is 168,485 m <sup>3</sup> (5,950,000 ft <sup>3</sup> ) for CH-TRU waste and 7,079 m <sup>3</sup> (250,000 ft <sup>3</sup> ) for RH-TRU waste |

### **2.2.4 Uncertainty Analysis for Proposed Transuranic Waste Inventory**

The TRU waste inventory used in PA is divided into three parts: 1) estimates of volumetric data, 2) estimates of non-radiological waste material data, and 3) estimates of radiological data. Each part includes the best estimates each DOE TRU waste site may have for a given set of containers managed as TRU waste. The uncertainty associated with these estimates increases or decreases, based on the sites' knowledge of their waste and amount of characterization information available.

As an example, volumetric information is available on waste that has been emplaced in the WIPP repository (emplaced waste volume), waste stored at the sites (stored waste volume), and waste expected to be generated by the sites in the future (projected waste volumes). The most accurate estimate of emplaced waste volume is reported in the WWIS. Since each drum is accounted for during emplacement, there is no error associated with the container count in the WWIS. However, depending on how the information is reported, there may be rounding errors as large as 1.1 percent associated with the volumes for ten-drum overpacks (TDOPs). The same uncertainty is assumed to be applicable for the stored waste at the DOE TRU waste sites, as each site maintains an accurate count of containers in storage. The largest uncertainty is that associated with the projected waste. This uncertainty can be as high as 100 percent, depending on processes and programs that may or may not be supported at the DOE TRU waste sites in the future. This projected waste volume will decrease as programs are defined and implemented and waste is generated. As programs reach maturity and more waste is emplaced, the uncertainty associated with projected volumes will diminish. With the wide variance of program maturity throughout the DOE complex and the uncertainty in future funding of these programs, the projected volumes will be difficult to quantify.

The uncertainty for WMPs for emplaced waste is not reported in the WWIS and therefore is not accounted for in the emplaced TRU waste inventory. However, an evaluation of CPR uncertainty was performed in 2006 (Kirchner 2006) supporting reduction in the mass of MgO required in the WIPP repository. This evaluation indicated that the uncertainty of the CPR materials in a room filled with 11,000 drums would be less than 0.3 percent. This same uncertainty could be applied to other WMPs.

The uncertainty of radionuclide measurements for emplaced waste is reported for all data collected during non-destructive assay characterization and is available in the WWIS. All radionuclide data reported for emplaced containers include the uncertainty in the final reported value.

Since volume is a contributing factor to WMP densities and radionuclide activity concentrations, the error in waste volumes should be considered in determining these estimates. However, the projected volume cannot be quantified for all of the waste streams in the repository. Therefore, the uncertainties for WMP and radionuclide estimates were determined from an analysis comparing emplaced waste volumes to those estimated in the inventory used to support the PABC (Crawford 2006). The uncertainties for WMP and radionuclide estimates for anticipated waste (stored + projected) have been reported to be less than 5 percent, based on a comparison of estimated and emplaced information for Rocky Flats Environmental Technology Site (RFETS). As waste streams are characterized and eventually emplaced, the uncertainty is expected to drop from 5 percent to less than 0.3 percent as determined for WMPs (Kirchner 2006). Uncertainties

in TRU waste inventory parameters will decrease as more waste is characterized and emplaced, and projected waste streams are actualized.

### **2.3 Analyses Supporting the Annual Transuranic Waste Inventory Report - 2007**

In addition to collecting and processing information from the DOE TRU waste sites and securing the site information in a qualified database for future use, analyses were performed on the information to support this report. For example, information on emplaced waste was obtained from the WWIS and migrated into standardized CID Import Template (CIT) files; materials used to emplace waste (CPR, etc.) were calculated for a full repository (i.e., scaled); and the estimated chemical masses of organic ligands, oxyanions, and solidified cements in the disposal volume for WIPP were calculated.

These analyses were performed and documented in accordance with LCO-QP9-1, *Analyses* (LANL-CO 2005). Some analyses were identified in INV-AP-01, Revision 2, *Analysis Plan for Transuranic Inventory* (LANL-CO 2006). Other analyses were performed as needed to support the inventory process as required by INV-SP-01, *Data Collection, Data Management and Control for the Comprehensive Inventory* (LANL-CO 2007b).

#### **2.3.1 Analysis of WIPP Waste Information System/Emplaced Data**

In order to account for TRU waste emplaced in the WIPP repository at the time of the inventory cut-off date, a documented request was made of the WWIS database administrators to supply data for the waste emplaced as of December 31, 2006. In order to effectively import the WWIS data into the CID, the WWIS data submittal was first migrated into standardized CIT files. This migration to the CIT files required that the original WWIS data submittal undergo various transformations, including but not limited to calculations, aggregations, and data mapping. An analysis was performed (Van Soest 2007) to document these activities in order to properly format the WWIS data for insertion into the CIT files. The results of this analysis are presented in sections 3.1 through 3.4.

#### **2.3.2 Analysis of Emplacement Materials Based on a Full Repository**

This analysis was conducted to update CPR materials that are used to facilitate the emplacement of waste at WIPP. This inventory of emplacement materials was calculated and is a best estimate based on current knowledge of the number and type of containers and the emplacement schemes expected to be used by the DOE TRU waste sites and WIPP Waste Handling Operations (WHO) (Crawford 2007). This analysis provides the expected disposal CPR and includes emplacement materials used for waste emplaced and anticipated to be emplaced in the WIPP repository (see section 3.2.3). The results of this analysis take into account packaging configurations used by WHO and include emplacement materials that apply to 7-packs of 55-gallon drums, 4-packs of 85-gallon drums, 3-packs of 100-gallon drums, SWBs, TDOPs, RH canisters, standard large box 2s (SLB2s; 5 ft x 5 ft x 8 ft), and MgO supersacks (woven plastic bags). To calculate the disposal mass of CPR materials introduced incidental to the waste emplacement process, the following process was used:

- The number and type of each waste container was calculated for emplaced, stored, and projected waste.

- The projected waste volume value was scaled to a full repository value using the CH- and RH-TRU waste scaling factors, determined in section 2.2.1, and added to the unscaled stored and emplaced volumes.
- Using a list of emplacement assumptions and the results of calculations for numbers of containers by type, the numbers of waste emplacement units were calculated.
- Quantities of CPR materials for emplacement units were calculated from the assumptions and the known mass of CPR materials for the configuration of each waste emplacement unit.
- Waste emplacement units were then mathematically constructed into waste stacks using the emplacement assumptions for each container type. This allowed for the calculation of the number of supersacks to be emplaced on each stack and their CPR contribution.
- The contribution of CPR for each emplacement unit, stack, and supersack was summed and reported as an emplacement material total for the repository.

These calculations were performed using data from the CID on the TRU waste inventory as of December 31, 2006. The results of this analysis are presented in section 3.2.3.

### **2.3.3 Analysis for Chemical Components**

In response to a request from SNL-CPG (Dunagan 2007), this report provides information about the chemical components of the waste similar to that supplied in support of the CCA PA by the TWBIR, Revision 3, and in support of the CRA-2004 PA by the TWBIR-2004. This includes a calculation of the disposal mass of organic ligands (complexing agents), the disposal mass of oxyanions (nitrate, sulfate, and phosphate), and the disposal mass of solidified cements expected in the disposal volume for WIPP. The DOE TRU waste sites reported the complexing agents and oxyanions in weight percent and the cements as a density (in  $\text{kg}/\text{m}^3$ ). PA requires mass units (kg) (Dunagan 2007) for complexing agents, oxyanions, and cements; therefore, an analysis was performed to convert these data (which are in the CID) into kg. The analysis (Van Soest 2008a) compared the CID data with previously published totals from the TWBIR-2004. With the understanding that some of this waste may have been emplaced at WIPP since this report, it is recognized that the 2006 data reported by the sites may reflect lesser amounts of chemical components. In order to conservatively report the mass of the chemical components, the following cases were developed and their respective methodology documented:

Determine whether chemical components in waste streams reported in the TWBIR-2004 are also returned in the 2006 query, recognizing and accounting for waste stream identifications (IDs) that may have been combined or divided. If so, then:

|               |  |
|---------------|--|
| <b>Case 1</b> | If all or a portion of those waste streams have been shipped to and emplaced at WIPP, the greater of the TWBIR 2004 or 2006 totals will be reported, unless a specific lesser value is otherwise documented to be more accurate. |
| <b>Case 2</b> | If no waste stream has been shipped to and emplaced at WIPP, the 2006 total will be reported.  |

Determine whether chemical components were reported in the 2006 query and were not previously reported in the TWBIR-2004.

|               |   |
|---------------|---|
| <b>Case 3</b> | Chemical components that are newly reported in 2006 will be reported. |
|---------------|---|

Determine whether chemical components were reported in the TWBIR-2004 and are not returned in the 2006 query.

|               |  |
|---------------|--|
| <b>Case 4</b> | If the waste streams are still identified in the 2006 inventory as WIPP-bound, have been rolled into a new waste stream ID that is WIPP-bound, or have been entirely emplaced at WIPP, the chemical component values will be carried forward and reported. |
| <b>Case 5</b> | If the waste streams have been changed to potential or removed from the inventory for other reasons, the values will not be carried forward and reported.  |

The results of this analysis are presented in sections 3.3.1, 3.3.2, and 3.3.3 for cements, complexing agents, and oxyanions, respectively.



### **3.0 TRANSURANIC WASTE INVENTORY ESTIMATES**

This section presents the TRU waste inventory that was collected for this report. The data were collected and stored in the CID and were validated by the DOE TRU waste sites, as discussed in section 2.1.

This presentation of the TRU waste inventory consists of summaries of the inventory information collected from the DOE TRU waste sites and information calculated from the data submitted by the sites. Section 3.1 presents TRU waste volume information provided by the sites for CH- and RH-TRU waste and the volume of emplaced waste in the WIPP repository. Data for emplaced waste were obtained from the WWIS. Section 3.2 presents the non-radiological TRU waste inventory as reported by the sites and the WWIS. This includes roll-ups of the waste materials (section 3.2.1), packaging materials (section 3.2.2), and emplacement materials used in the repository (section 3.2.3). Section 3.3 provides information about the chemical components of the waste, and section 3.4 presents the TRU waste radionuclide inventory reported by the sites and the WWIS.

The TRU waste inventory, as collected from the DOE TRU waste sites, is presented by waste stream in Appendices A, B, and C. Appendix A presents individual waste stream profiles (WSPs) for all TRU waste streams planned for emplacement in the WIPP repository. Appendix B presents individual WSPs for all TRU waste streams that were emplaced in WIPP as of December 31, 2006. Appendix C presents individual WSPs for non-WIPP/potential-WIPP TRU waste streams, as discussed in section 4.

Appendix D presents comparisons among the CCA, CRA-2004, and this report for volume, WMPs, scaling factors, and radionuclide data. Appendix E presents the PA waste-stream-level decayed radionuclides for seven time periods, with volumes and activities scaled. Appendix F presents the crosswalk of waste streams among the TWBIR, Revision 2, the TWBIR-2004, and this report.

#### **3.1 Transuranic Waste Volume Inventory Estimates**

This section presents the TRU waste inventory volume estimates that were collected for this report. The volume estimates are stored in the CID, which contains data that have been fully qualified for use under the LANL-CO QA Program, as discussed in sections 1.1 and 2.1.

The TRU waste volume estimates were derived from the container type and count provided by the DOE TRU waste sites. The sites provided both stored and projected container types and count for both current form and final form containers. The volume for the final form was calculated using established container volumes for WIPP-approved containers so that there is consistency in the final form volume from site to site. Section 3.1.1 presents TRU waste inventory volume information for emplaced waste reported by site. Section 3.1.2 presents stored, projected, and anticipated TRU waste volumes by site. Section 3.1.3 provides the total disposal volume roll-up by site.

##### **3.1.1 Emplaced Volumes by Site**

Data on waste emplaced in the WIPP repository were obtained from the WWIS and uploaded to the CID after conversion using the analysis discussed in section 2.3.1. The information was

provided by container type and count. The volume for the emplaced waste was calculated using the same container volumes as used for the final form containers from the DOE TRU waste sites so that there was consistency with all WIPP-approved containers. The last column of Table 3-1 shows the total emplaced CH-TRU waste volume by DOE TRU waste site, and the last column of Table 3-2 shows the total emplaced RH-TRU waste volume by DOE TRU waste site.

### 3.1.2 Stored, Projected, and Anticipated Volumes by Site

TRU waste volume information requested from the DOE TRU waste sites falls into two categories: stored waste (i.e., waste that currently exists at the site, regardless of whether it is in its final form) and projected waste (waste that will be generated in the future). The total waste stream volume information collected from the sites included stored and projected components as applicable for each TRU waste stream. The sites also reported both current form and final form waste volumes for their waste streams. The final form volume accounts for the payload container (the volume the waste container occupies in the WIPP repository). Since PA only considers the waste volume that will be disposed in the WIPP repository, only final form volumes were used in the calculation of actual (reported by the site) and scaled (used in PA) TRU waste volumes, as discussed in section 3.1.3.

Table 3-1 shows the total CH-TRU unscaled waste stored, projected, and anticipated (stored plus projected), using final form payload volumes anticipated to be shipped to WIPP and broken out by DOE TRU waste site. Table 3-2 shows the total RH-TRU unscaled waste stored, projected, and anticipated, using final form payload volumes anticipated to be shipped to WIPP and broken out by site.

**Table 3-1. WIPP CH-TRU Unscaled Waste Inventory Volumes By Site**

| Storage/Generator Site                                 | Stored Volumes (m <sup>3</sup> ) | Projected Volumes (m <sup>3</sup> ) | Anticipated Volumes (m <sup>3</sup> ) | Emplaced Volumes (m <sup>3</sup> ) |
|--|----------------------------------|-------------------------------------|---------------------------------------|------------------------------------|
| Argonne National Laboratory – East                     | 8.3E+00                          | 7.9E+01                             | 8.8E+01                               | 1.2E+02                            |
| Argonne National Laboratory – West (MFC)               | 7.5E+00                          | 3.0E+01                             | 3.7E+01                               | 0.0E+00                            |
| Bettis Atomic Power Laboratory                         | 1.9E+01                          | 0.0E+00                             | 1.9E+01                               | 0.0E+00                            |
| Hanford (Richland) Site                                | 1.4E+04                          | 0.0E+00                             | 1.4E+04                               | 2.6E+03                            |
| Idaho National Laboratory                              | 5.9E+04                          | 0.0E+00                             | 5.9E+04                               | 1.6E+04                            |
| Knolls Atomic Power Laboratory - Nuclear Fuel Services | 2.1E+00                          | 1.2E+02                             | 1.3E+02                               | 0.0E+00                            |
| Lawrence Berkeley Laboratory                           | 2.1E-01                          | 2.1E-01                             | 4.2E-01                               | 0.0E+00                            |
| Lawrence Livermore National Laboratory                 | 2.9E+02                          | 9.1E+01                             | 3.8E+02                               | 1.4E+02                            |
| Los Alamos National Laboratory                         | 1.5E+04                          | 1.1E+03                             | 1.6E+04                               | 1.5E+03                            |
| Nevada Test Site                                       | 3.0E+02                          | 3.7E+02                             | 6.7E+02                               | 4.0E+02                            |
| Oak Ridge National Laboratory                          | 6.8E+02                          | 3.4E+02                             | 1.0E+03                               | 0.0E+00                            |
| Rocky Flats Environmental Technology Site              | 0.0E+00                          | 0.0E+00                             | 0.0E+00                               | 1.5E+04                            |
| Sandia National Laboratories - Albuquerque             | 2.5E+01                          | 4.4E+00                             | 2.9E+01                               | 0.0E+00                            |
| Savannah River Site                                    | 1.0E+04                          | 8.4E+02                             | 1.1E+04                               | 9.6E+03                            |
| U.S. Army Materiel Command                             | 2.1E-01                          | 0.0E+00                             | 2.1E-01                               | 0.0E+00                            |
| <b>Grand Total</b>                                     | <b>1.0E+05</b>                   | <b>3.0E+03</b>                      | <b>1.0E+05</b>                        | <b>4.6E+04</b>                     |

Data Source: CID Data Version D.6.06, LANL-CO 2008.

NOTE: Actual numerical values have been rounded for presentation purposes.

This table contains data for WIPP-bound waste streams reported by site only; it does not include data for potential waste streams.

**Table 3-2. WIPP RH-TRU Unscaled Waste Inventory Volumes By Site**

| Storage/Generator Site                       | Stored Volumes (m <sup>3</sup> ) | Projected Volumes (m <sup>3</sup> ) | Anticipated Volumes (m <sup>3</sup> ) | Emplaced Volumes (m <sup>3</sup> ) |
|--|----------------------------------|-------------------------------------|---------------------------------------|------------------------------------|
| Argonne National Laboratory - East           | 1.1E+01                          | 3.2E+01                             | 4.3E+01                               | 0.0E+00                            |
| Argonne National Laboratory – West (MFC)     | 6.2E+00                          | 3.5E+01                             | 4.1E+01                               | 0.0E+00                            |
| Bettis Atomic Power Laboratory               | 3.6E+00                          | 0.0E+00                             | 3.6E+00                               | 0.0E+00                            |
| Hanford (Richland) Site                      | 1.2E+03                          | 1.3E+02                             | 1.3E+03                               | 0.0E+00                            |
| Idaho National Laboratory                    | 3.7E+02                          | 0.0E+00                             | 3.7E+02                               | 0.0E+00                            |
| Knolls Atomic Power Laboratory – Schenectady | 3.0E+01                          | 8.0E+01                             | 1.1E+02                               | 0.0E+00                            |
| Los Alamos National Laboratory               | 9.8E+01                          | 0.0E+00                             | 9.8E+01                               | 0.0E+00                            |
| Oak Ridge National Laboratory                | 9.3E+02                          | 3.6E+02                             | 1.3E+03                               | 0.0E+00                            |
| Sandia National Laboratories - Albuquerque   | 2.0E+01                          | 0.0E+00                             | 2.0E+01                               | 0.0E+00                            |
| Savannah River Site                          | 4.2E+01                          | 3.6E+01                             | 7.8E+01                               | 0.0E+00                            |
| <b>Grand Total</b>                           | <b>2.7E+03</b>                   | <b>6.7E+02</b>                      | <b>3.3E+03</b>                        | <b>0.0E+00</b>                     |

Data Source: CID Data Version D.6.06, LANL-CO 2008.

NOTE: Actual numerical values have been rounded for presentation purposes.

This table contains data for WIPP-bound waste streams reported by site only; it does not include data for potential waste streams.

### 3.1.3 Total Disposal Volume by Site

PAs conducted in support of WIPP have been predicated on the assumption that the WIPP repository would be filled to its design capacity at the time of closure. The design capacity for WIPP is 6,200,000 ft<sup>3</sup> (175,564 m<sup>3</sup>), as set by the LWA, with a limit of 250,000 ft<sup>3</sup> (7,079 m<sup>3</sup>) for RH-TRU waste as imposed by the C&C Agreement; therefore, the difference in the design capacity and the RH-TRU limit sets the CH-TRU disposal limit at 5,950,000 ft<sup>3</sup> (168,485 m<sup>3</sup>). The volume of anticipated (stored plus projected) and emplaced (CH- and RH-TRU) waste reported by the DOE TRU waste sites in support of this report is less than the design capacity for WIPP. Therefore, CH- and RH-TRU waste volumes were scaled to the design capacity of WIPP for PA. The *scaled* inventory for PA is referred to as the TRU waste “disposal” volume. Scaling is performed only on the projected waste.

The TRU waste disposal volume for a CH- or RH-TRU waste stream was obtained by multiplying the projected volume by the appropriate scaling factor and adding that value to the stored and emplaced volumes for each waste stream. Section 2.2.1 discusses the CH and RH scaling factors and associated calculations. Table 3-3 shows the total WIPP waste disposal volume by site for both CH- and RH-TRU waste.

**Table 3-3. WIPP CH and RH-TRU Disposal Volume By Site**

| Storage/Generator Site                                 | CH<br>(m <sup>3</sup> ) <sup>1</sup> | RH<br>(m <sup>3</sup> ) <sup>1</sup> |
|--|--------------------------------------|--------------------------------------|
| Argonne National Laboratory - East                     | 7.5E+02                              | 2.2E+02                              |
| Argonne National Laboratory – West (MFC)               | 2.4E+02                              | 2.3E+02                              |
| Bettis Atomic Power Laboratory                         | 1.9E+01                              | 3.6E+00                              |
| Hanford (Richland) Site                                | 1.6E+04                              | 2.0E+03                              |
| Idaho National Laboratory                              | 7.6E+04                              | 3.7E+02                              |
| Knolls Atomic Power Laboratory - Nuclear Fuel Services | 9.7E+02                              | 0.0E+00                              |
| Knolls Atomic Power Laboratory - Schenectady           | 0.0E+00                              | 5.6E+02                              |
| Lawrence Berkeley Laboratory                           | 1.8E+00                              | 0.0E+00                              |
| Lawrence Livermore National Laboratory                 | 1.1E+03                              | 0.0E+00                              |
| Los Alamos National Laboratory                         | 2.5E+04                              | 9.8E+01                              |
| Nevada Test Site                                       | 3.5E+03                              | 0.0E+00                              |
| Oak Ridge National Laboratory                          | 3.3E+03                              | 3.3E+03                              |
| Rocky Flats Environmental Technology Site              | 1.5E+04                              | 0.0E+00                              |
| Sandia National Laboratories - Albuquerque             | 5.9E+01                              | 2.0E+01                              |
| Savannah River Site                                    | 2.7E+04                              | 2.8E+02                              |
| U.S. Army Materiel Command                             | 2.1E-01                              | 0.00E+00                             |
| <b>Grand Total</b>                                     | <b>1.7E+05</b>                       | <b>7.1E+03</b>                       |

Data Source: CID Data Version D.6.06, LANL-CO 2008.

NOTE: Actual numerical values have been rounded for presentation purposes.

<sup>1</sup> Volume estimates based on 168,485 m<sup>3</sup> of CH waste and 7,079 m<sup>3</sup> of RH waste.

### 3.2 Waste, Packaging, and Emplacement Material Densities

This section presents the non-radiological TRU waste inventory that was collected for this report. Section 3.2.1 presents the inventory of waste materials; section 3.2.2 presents the inventory of packaging materials; and section 3.2.3 presents the inventory of emplacement materials used for disposal of waste in the WIPP repository.

The DOE has many reasons for obtaining and tracking non-radiological information about the TRU waste inventory destined for WIPP. For example, the DOE tracks some waste materials that go into the repository (i.e., CPR materials) because they may affect gas generation in the repository (Dunagan 2007). The DOE needs to know the non-radiological properties of the waste not only for PA but also to support safe and economical transportation of the waste and operation of the WIPP facility.

#### 3.2.1 Waste Materials

As part of the data call for this report, the DOE TRU waste sites were asked to provide the average density (kg/m<sup>3</sup>) of each of the WMPs in each waste stream.

The following WMP descriptions were excerpted from the TWBIR, Revision 2, and are operative in this report:

- Iron-based metal/alloys – Includes iron and steel alloys in the waste, but does not include the waste container materials. Also includes an iron-based metallic phase associated with any vitrification process, if applicable.
- Aluminum-based metal/alloys – Aluminum or aluminum-base alloys in the waste materials.
- Other metal/alloys – All other metal/alloys (e.g., copper, zirconium, tantalum) found in the waste materials, including the lead portion of leaded rubber gloves/aprons.
- Other inorganic material – Inorganic non-metal waste materials such as concrete, glass, firebrick, ceramics, graphite, sand, and inorganic sorbents.
- Vitrified material – Waste that has been melted or fused at high temperatures with glass-forming additives, such as soil or silica, in appropriate proportions to result in a homogeneous glass-like matrix. (Note that any unoxidized metallic phases, if present, are included in the iron-base metal/alloys WMP.)
- Cellulosic material – Materials generally derived from high-polymer plant carbohydrates such as paper, cardboard, Kimwipes<sup>®</sup>, wood, cellophane, and cloth.
- Rubber material – Natural or manmade elastic latex materials such as Hypalon<sup>®</sup>, neoprene, surgeons' gloves, and leaded-rubber gloves (rubber part only).
- Plastic material – Generally manmade, often derived from petroleum feedstock. Examples are polyethylene, polyvinylchloride, Lucite<sup>®</sup> and Teflon<sup>®</sup>.
- Solidified inorganic material – Any homogeneous materials consisting of sludge or aqueous-base liquids that are solidified with Envirostone<sup>®</sup> or other solidification agents. Examples are wastewater treatment sludge and inorganic particulates.
- Solidified organic material – Organic resins, solidified organic liquids, and sludges.
- Cements (solidified) – Used in solidifying liquids, particulates, and sludges.
- Soil – Generally consists of naturally occurring soils that have been contaminated with radioactive waste materials at a high enough level to be considered TRU waste.

PAs conducted in support of WIPP have been predicated on the assumption that waste materials are distributed homogeneously throughout the repository. As a result, a WIPP average estimated value for waste material densities is provided in section 2.2.2. The estimated WIPP WMP average densities for CH- and RH-TRU waste are presented in Tables 3-4 and 3-5, respectively.

### **3.2.2 Packaging Materials**

Packaging materials (such as steel, plastic, cellulose, and lead) are the materials used to construct the containers that hold TRU waste. PA assumes that packaging materials are distributed homogeneously throughout the WIPP repository. As a result, a WIPP average value for

packaging material densities is provided for PA. The WIPP packaging material average densities for CH- and RH-TRU waste are presented in Tables 3-4 and 3-5, respectively.

Packaging material densities have historically been reported by the DOE TRU waste sites. With the development of the CID, the packaging material densities for the WIPP-approved payload containers are fixed values in the CID. The sites report the final form container type, and the CID populates the packaging material densities with consistent values associated with the container type. An analysis was performed (McInroy 2006) to calculate the packaging material densities to be used in the CID. The purpose of this analysis was to document calculations that provided the packaging material densities for steel, plastic, cellulose, and lead, which may be used in the containers that package CH- and RH-TRU waste for shipment to WIPP.

**Table 3-4. WIPP CH-TRU Waste Material Parameter Inventory**

| <b>Waste Material</b>           | <b>Average Density<br/>(kg/m<sup>3</sup>)</b> |
|---------------------------------|---|
| Iron-based Metals/Alloys        | 1.8E+02                                       |
| Aluminum-based Metals/Alloys    | 1.5E+01                                       |
| Other Metal/Alloys              | 1.1E+01                                       |
| Other Inorganic Materials       | 3.4E+01                                       |
| Cellulosics                     | 7.3E+01                                       |
| Rubber                          | 6.6E+00                                       |
| Plastics                        | 8.2E+01                                       |
| Cements                         | 6.8E+01                                       |
| Solidified Inorganic Material   | 1.1E+02                                       |
| Solidified Organic Material     | 4.6E+01                                       |
| Soils/gravel                    | 9.1E+00                                       |
| Vitrified                       | 0.0E+00                                       |
| <b>Package Material</b>         |   |
| Packaging Material, Steel       | 1.8E+02                                       |
| Packaging Material, Plastic     | 1.9E+01                                       |
| Packaging Material, Cellulosics | 4.7E+00                                       |
| Packaging Material, Lead        | 0.0E+00                                       |

Data Source: CID Data Version D.6.06, LANL-CO 2008.

NOTE: Actual numerical values have been rounded for presentation purposes.

**Table 3-5. WIPP RH-TRU Waste Material Parameter Inventory**

| <b>Waste Material</b>           | <b>Average Density<br/>(kg/m<sup>3</sup>)</b> |
|---------------------------------|---|
| Iron-based Metals/Alloys        | 1.9E+02                                       |
| Aluminum-based Metals/Alloys    | 1.0E+01                                       |
| Other Metal/Alloys              | 4.5E+01                                       |
| Other Inorganic Materials       | 2.3E+01                                       |
| Cellulosics                     | 1.4E+01                                       |
| Rubber                          | 4.7E+00                                       |
| Plastics                        | 1.8E+01                                       |
| Cements                         | 1.2E+01                                       |
| Solidified Inorganic Material   | 5.9E+02                                       |
| Solidified Organic Material     | 7.1E-01                                       |
| Soils/gravel                    | 7.7E+01                                       |
| Vitrified                       | 7.2E-02                                       |
| <b>Package Material</b>         |   |
| Packaging Material, Steel       | 6.1E+02                                       |
| Packaging Material, Plastic     | 1.1E+01                                       |
| Packaging Material, Cellulosics | 0.0E+00                                       |
| Packaging Material, Lead        | 5.4E+00                                       |

Data Source: CID Data Version D.6.06, LANL-CO 2008.

NOTE: Actual numerical values have been rounded for presentation purposes.

### 3.2.3 Emplacement Materials

The WIPP WHO uses several emplacement materials to facilitate the disposal of TRU waste containers and MgO in the WIPP repository. The amount of MgO emplaced on top of the containers is based on a safety factor and is subject to change based on the amount of CPR in the repository. The CPR, however, has been estimated for each payload configuration expected to be emplaced in the repository (Crawford 2007). Plastic and cellulosic materials are used to emplace CH-TRU waste, but no rubber materials are used. It is assumed in this report that RH-TRU waste will be emplaced in boreholes in the walls of the disposal rooms. Currently, no CPR material is used for RH-TRU waste emplacement.

The materials used to emplace CH-TRU waste are:

- Polyethylene slip-sheets for 7-packs of 55-gallon drums and/or pipe overpack components (POCs), 4-packs of 85-gallon drums, 3-packs of 100-gallon drums, and MgO supersacks (plastics)
- Fiberboard slip-sheets (cellulosic material) for SWBs and TDOPs
- Woven polypropylene supersacks (plastic material) containing MgO
- Cardboard stabilizers (cellulosic material) for supersacks
- Stretch wrap (plastic material) for 7-packs, 4-packs, and 3-packs

For CH-TRU waste, the total disposal mass of the emplacement materials was calculated based on information provided by the DOE TRU waste sites and the WWIS as of December 31, 2006. The relevant information is provided in Table 3-6.

**Table 3-6. Total Disposal CPR by Supersacks and Emplacement Units<sup>1</sup>**

| <b>CPR Component</b> | <b>From Supersacks (kg)</b> | <b>From Waste Emplacement Units (kg)</b> | <b>Total CPR Component (kg)</b> |
|----------------------|-----------------------------|--|---------------------------------|
| Cellulose            | 1.17E+05                    | 1.19E+05                                 | 2.36E+05                        |
| Plastic              | 3.85E+05                    | 1.03E+06                                 | 1.42E+06                        |
| Rubber               | 0                           | 0  | 0                               |

NOTE: Actual numerical values have been rounded for presentation purposes.

<sup>1</sup> Mass estimates are based on 168,485 m<sup>3</sup> of CH waste and 7,079 m<sup>3</sup> of RH waste.

### 3.3 Chemical Components in Transuranic Waste

As part of the data call for this report, the DOE TRU waste sites were asked to provide information about the chemical components of their waste streams. The sites were asked about cements, complexing agents (acetate, citrate, oxylate, and ethylenediaminetetraacetic acid [EDTA]), and oxyanions (nitrate, sulfate, and phosphate). The disposal masses presented in Tables 3-8, 3-10, and 3-12 are used by SNL-CPG in PA modeling calculations.

Specifically, cements, complexing agents, and oxyanions are calculated as the sum of the constituents found in anticipated waste scheduled for delivery to WIPP and any waste that has been emplaced where these components were reported in the TWBIR-2004. The methods used to estimate the disposal masses of cements, complexing agents, and oxyanions are discussed in section 2.3.3.

#### 3.3.1 Cement Content in Solidified Transuranic Waste

The DOE TRU waste sites have not reported cement densities consistently over time; therefore, for the inventory data call for this report, the sites were instructed to report their cements as WMPs. Table 3-7 shows TRU waste streams containing new amounts of cement that have changed since the last inventory report, and Table 3-8 shows the roll-up of the total solidified disposal mass of cements by site.



**Table 3-7. Waste Streams Reporting New Disposal Mass of Cement<sup>1</sup>**

| Waste Stream Identifier | Cements (kg) | Waste Stream Identifier | Cements (kg) |
|-------------------------|--------------|-------------------------|--------------|
| AW-N026.82              | 1.12E+03     | RL105-03                | 5.31E+04     |
| IN-ID-SDA-Debris        | 5.49E+02     | RL200-01                | 2.75E+00     |
| IN-ID-SDA-Sludge        | 8.03E+03     | RL209E-01               | 3.15E+03     |
| IN-ID-SDA-Soil          | 2.77E+02     | RL231Z-01               | 1.17E+05     |
| IN-W216.877             | 9.39E+03     | RL300-01                | 4.99E+03     |
| IN-W228.886             | 1.98E+03     | RL308-01                | 1.66E+02     |
| KN-B234TRU              | 2.20E+06     | RL324-01                | 1.67E+01     |
| LA-TA-55-35             | 1.83E+03     | RL325-01                | 6.74E+04     |
| LA-TA-55-36             | 9.05E+04     | RLBW-01                 | 1.04E+04     |
| LA-TA-55-37             | 5.16E+03     | RLGEV-01                | 8.14E+03     |
| LA-TA-55-40             | 1.61E+03     | RLPFP-01                | 7.10E+01     |
| LL-W019                 | 3.24E+03     | RLPRC-01                | 7.80E+02     |
| NT-W001                 | 8.74E+03     | SR-W027-999-AGNS-HOM    | 1.34E+04     |
| NT-W021                 | 1.44E+02     |                         |              |

<sup>1</sup> Mass estimates are based on 168,485 m<sup>3</sup> of CH waste and 7,079 m<sup>3</sup> of RH waste.

**Table 3-8. Disposal Mass of Cements<sup>1</sup>**

| ANL-E (kg) | ANL-W (MFC) (kg) | INL (kg) | KAPL-NFS (kg) | LANL (kg) | LLNL (kg) |
|------------|------------------|----------|---------------|-----------|-----------|
| 8.67E+03   | 2.05E+04         | 7.03E+06 | 2.20E+06      | 4.29E+06  | 2.28E+05  |

| NTS (kg) | ORNL (kg) | Hanford (kg) | RFETS (kg) | SRS (kg) | Total (kg)      |
|----------|-----------|--------------|------------|----------|-----------------|
| 8.89E+03 | 6.60E+04  | 2.66E+05     | 3.58E+05   | 1.58E+04 | <b>1.45E+07</b> |

NOTE: Sites not reporting cements are not listed in the table.

<sup>1</sup> Mass estimates are based on 168,485 m<sup>3</sup> of CH waste and 7,079 m<sup>3</sup> of RH waste.

### 3.3.2 Complexing Agents (Organic Ligands) in Transuranic Waste

The DOE tracks the mass of complexing agents destined for disposal in the WIPP repository because of their potential impact on solubility of actinides in the waste. In the latest inventory request, the DOE TRU waste sites were asked to update their estimates of complexing agents in the waste streams. When applicable, the sites reported the estimates of complexing agents in waste streams as a weight percent. As a result of this request, INL reported a larger quantity of EDTA (in weight percent) than the EDTA reported in CRA-2004. The quantity of EDTA in INL's waste streams was subsequently verified and checked against existing AK, resulting in a total slightly more than previously reported.

Also, as a result of the request for additional complexing agent information, Hanford RL identified 16 waste streams containing complexing agents that were not identified in TWBIR-2004. Further investigation by the site revealed that those complexing agents may have been disposed in low-level waste (LLW). An analysis performed by Hanford RL (Evans et al. 2008) indicated the concentration of EDTA found in three waste streams (RL-222S-01, RL-300-01, and

RL-325-01) had lower concentrations than first reported in their Solid Waste Inventory Tracking System (SWITS).

Additional information on EDTA and chelating agents will be collected in the next TRU waste inventory update and, at that time, mass quantities of EDTA will be further refined and quantified and ultimately reported in the *Annual Transuranic Inventory Report – 2008*.

Table 3-9 shows TRU waste streams containing new disposal masses of complexing agents (Van Soest 2008a) that have changed since the last inventory report. Table 3-10 shows the roll-up of the total disposal mass of complexing agents by site.

**Table 3-9. Waste Streams Reporting New Disposal Masses of Complexing Agents<sup>1</sup>**

| Waste Stream ID  | Acetic Acid (kg) | Sodium Acetate (kg) | Citric Acid (kg) | Sodium Citrate (kg) | Oxalic Acid (kg) | Sodium Oxalate (kg) | Sodium EDTA <sup>2</sup> (kg) |
|------------------|------------------|---------------------|------------------|---------------------|------------------|---------------------|-------------------------------|
| BN004-S          | --               | --                  | --               | --                  | --               | --                  | 5.36E+01                      |
| ID-RF-S5300-A-S  | --               | --                  | --               | --                  | --               | --                  | 8.33E-01                      |
| IN-BN004         | --               | --                  | --               | --                  | --               | --                  | 2.24E+02                      |
| IN-ID-RF-S5300-A | --               | --                  | --               | --                  | --               | --                  | 2.69E+01                      |
| INW169.001-S     | --               | --                  | --               | --                  | --               | --                  | 1.09E+00                      |
| RF001.01-S       | --               | --                  | --               | --                  | --               | --                  | 3.25E-01                      |
| RF101.01-S       | --               | --                  | --               | --                  | --               | --                  | 4.30E+00                      |
| RF101.29-S       | --               | --                  | --               | --                  | --               | --                  | 3.10E-01                      |
| RF101.30-S       | --               | --                  | --               | --                  | --               | --                  | 1.79E+00                      |
| RF101.31-S       | --               | --                  | --               | --                  | --               | --                  | 1.57E+00                      |
| RL200-01         | --               | --                  | 2.75E+00         | --                  | 3.79E+00         | --                  | --                            |
| RL216Z-02        | --               | --                  | --               | --                  | 6.22E+00         | --                  | --                            |
| RL222S-01        | --               | 7.17E+00            | --               | --                  | 7.17E+00         | --                  | 3.00E-01 <sup>2</sup>         |
| RL233S-01        | 5.45E-02         | --                  | 1.17E+00         | --                  | 5.45E-02         | --                  | --                            |
| RL300-01         | --               | 5.28E+01            | --               | 2.13E+01            | 2.57E+01         | 1.23E+01            | 3.00E-01 <sup>2</sup>         |
| RL308-01         | --               | 2.38E-02            | 1.17E-02         | 9.65E-02            | 1.17E-02         | 1.08E-01            | 1.08E-01                      |
| RL324-01         | --               | 1.79E-01            | 8.96E-02         | 7.40E-01            | 8.96E-02         | --                  | 8.29E-01                      |
| RL325-01         | 3.39E+01         | 4.03E+02            | 2.01E+02         | 1.66E+03            | 2.01E+02         | 6.38E+02            | 3.00E-01 <sup>2</sup>         |
| RLBAT-01         | 1.47E+00         | --                  | 5.15E-01         | --                  | --               | --                  | --                            |
| RLBW-01          | 3.05E+00         | 1.18E+01            | 1.84E+00         | --                  | --               | --                  | --                            |
| RLESG-01         | --               | --                  | 5.11E+00         | --                  | 4.96E+00         | --                  | --                            |
| RLGEV-01         | --               | --                  | 8.64E+00         | --                  | --               | --                  | --                            |
| RLPFP-01         | 1.37E+04         | 2.84E+04            | 1.00E+01         | --                  | 5.42E+01         | 7.79E+00            | 7.79E+00                      |
| RLPFP-05         | 5.39E-02         | 1.11E-01            | --               | --                  | 2.23E-04         | --                  | --                            |
| RLSWO-01         | 3.30E-01         | --                  | 8.67E+00         | --                  | 1.37E-03         | --                  | --                            |
| RLWAR-01         | --               | --                  | 4.02E+03         | --                  | 1.39E+04         | --                  | --                            |

<sup>1</sup> Mass estimates are based on 168,485 m<sup>3</sup> of CH waste and 7,079 m<sup>3</sup> of RH waste.

<sup>2</sup> An analyses (Evans et al. 2008) at Hanford RL found EDTA in these waste streams to be less than 1 kilogram.

**Table 3-10. Disposal Mass of Complexing Agents<sup>1</sup>**

| Compound       | INL<br>(kg) | LANL<br>(kg) | Hanford-RL<br>(kg) | RFETS<br>(kg) | Total<br>(kg)   |
|----------------|-------------|--------------|--------------------|---------------|-----------------|
| Acetic Acid    | 2.90E+02    | 1.10E+01     | 1.38E+04           | 5.29E+00      | <b>1.41E+04</b> |
| Citric Acid    | 2.01E+02    | 1.22E+03     | 4.26E+03           | 3.63E+00      | <b>5.68E+03</b> |
| Oxalic Acid    | 2.01E+02    | 1.51E+04     | 1.42E+04           | 3.63E+00      | <b>2.95E+04</b> |
| Sodium Acetate | 2.46E+03    | --           | 2.89E+04           | 4.46E+01      | <b>3.14E+04</b> |
| Sodium Citrate | 8.59E+02    | --           | 1.68E+03           | 1.66E+01      | <b>2.56E+03</b> |
| Sodium EDTA    | 3.07E+02    | --           | 1.02E+02           | 1.18E+01      | <b>4.23E+02</b> |
| Sodium Oxalate | --          | --           | 6.58E+02           | --            | <b>6.58E+02</b> |

NOTE: Sites not reporting complexing agents are not listed in the table.

<sup>1</sup> Mass estimates are based on 168,485 m<sup>3</sup> of CH waste and 7,079 m<sup>3</sup> of RH waste.

### 3.3.3 Oxyanions in Transuranic Waste

An estimate of the masses of nitrate, sulfate, and phosphate in waste expected for disposal in the WIPP repository must be reported (Dunagan 2007). An analysis (Van Soest 2008a) was completed to determine the oxyanions by waste stream. The analysis was done to convert the weight percentages reported by the DOE TRU waste sites into disposal masses, as discussed in section 2.3.3.

Table 3-11 shows TRU waste streams in which new disposal amounts of oxyanions have changed since the last inventory report, and Table 3-12 shows the roll-up of the total disposal mass of oxyanions by waste site.

**Table 3-11. Waste Streams Reporting New Disposal Masses of Oxyanions<sup>1</sup>**

| Waste Stream Identifier | Nitrate<br>(kg) | Sulfate<br>(kg) | Phosphate<br>(kg) |
|-------------------------|-----------------|-----------------|-------------------|
| IN-BN004                | 0.00E+00        | 5.14E+03        | 5.14E+03          |
| IN-W228.884             | 3.38E+02        | 3.38E+02        | 0.00E+00          |
| IN-W228.885             | 3.38E+01        | 3.38E+01        | 0.00E+00          |
| IN-W228.886             | 5.01E+01        | 5.01E+01        | 0.00E+00          |
| OR-W215                 | 4.37E+05        | 6.24E+03        | 3.12E+00          |
| RL200-01                | 2.65E+02        | 0.00E+00        | 2.56E+02          |
| RL201-01                | 0.00E+00        | 2.62E+00        | 0.00E+00          |
| RL202S-01               | 5.69E-01        | 0.00E+00        | 0.00E+00          |
| RL209E-01               | 1.81E+02        | 4.33E+02        | 5.45E+01          |
| RL216Z-02               | 5.74E+02        | 2.56E+01        | 6.37E+02          |
| RL222S-01               | 1.08E+02        | 1.51E+01        | 1.61E+02          |
| RL231Z-01               | 1.69E+02        | 2.19E+04        | 1.23E+04          |
| RL231Z-03               | 5.90E-01        | 6.20E+00        | 2.77E+02          |
| RL233S-01               | 2.55E+02        | 5.54E-01        | 1.98E+00          |
| RL300-01                | 1.32E+03        | 0.00E+00        | 3.14E+02          |
| RL308-01                | 5.39E-01        | 2.08E+02        | 1.18E-01          |
| RL324-01                | 4.12E+00        | 3.26E+00        | 8.69E-01          |
| RL325-01                | 1.61E+04        | 1.22E+04        | 4.59E+03          |
| RL325-03                | 1.27E+01        | 0.00E+00        | 0.00E+00          |
| RLBAT-01                | 0.00E+00        | 2.14E+00        | 2.43E+00          |

| Waste Stream Identifier | Nitrate (kg) | Sulfate (kg) | Phosphate (kg) |
|-------------------------|--------------|--------------|----------------|
| RLBW-01                 | 4.32E+00     | 1.17E+03     | 2.45E+00       |
| RLESG-01                | 4.96E+00     | 1.16E+04     | 3.14E+02       |
| RLEXX-01                | 3.29E-01     | 0.00E+00     | 1.09E-01       |
| RLGEV-01                | 7.84E+00     | 8.85E+02     | 7.84E+00       |
| RLPFP-01                | 5.18E+05     | 2.22E+04     | 5.11E+05       |
| RLPFP-03                | 8.08E+01     | 0.00E+00     | 5.19E+00       |
| RLPFP-04                | 3.83E-02     | 0.00E+00     | 3.27E-01       |
| RLPFP-05                | 3.12E+00     | 4.48E-01     | 2.09E+00       |
| RLPURX-01               | 3.89E+01     | 0.00E+00     | 0.00E+00       |
| RLSWO-01                | 1.40E+01     | 2.73E+00     | 1.70E+02       |
| RLWAR-01                | 1.20E+04     | 2.06E+03     | 0.00E+00       |

<sup>1</sup> Mass estimates are based on 168,485 m<sup>3</sup> of CH waste and 7,079 m<sup>3</sup> of RH waste.

**Table 3-12. Disposal Masses of Oxyanions<sup>1</sup>**

| Compound  | INL (kg) | LANL (kg) | LLNL (kg) | ORNL (kg) | Hanford-RL (kg) | RFETS (kg) | Total (kg)      |
|-----------|----------|-----------|-----------|-----------|-----------------|------------|-----------------|
| Nitrate   | 8.52E+05 | 8.51E+05  | 0.00E+00  | 4.37E+05  | 5.50E+05        | 9.31E+03   | <b>2.70E+06</b> |
| Sulfate   | 1.64E+04 | 4.45E+05  | 1.00E+03  | 6.24E+03  | 7.28E+04        | 5.52E+04   | <b>5.96E+05</b> |
| Phosphate | 5.14E+03 | 0.00E+00  | 0.00E+00  | 3.12E+00  | 5.30E+05        | 8.50E+01   | <b>5.35E+05</b> |

NOTE: Sites not reporting oxyanions are not listed in the table.

<sup>1</sup> Mass estimates are based on 168,485 m<sup>3</sup> of CH waste and 7,079 m<sup>3</sup> of RH waste.

### 3.4 Transuranic Waste Radionuclide Inventory

This section presents the TRU waste radionuclide activity concentration inventory collected for this report. The roll-ups for the TRU waste radionuclide concentrations, summations of radionuclide activities, and disposal activities are generated from the CID (LANL 2008).

#### 3.4.1 Unscaled Radionuclide Activities by Site

Tables 3-13 and 3-14 provide the comprehensive unscaled WIPP-bound DOE TRU waste site radionuclide inventory estimates in total curies for CH- and RH-TRU waste, respectively. The radionuclides are decayed from the waste stream assay year through the end of CY 2006. These tables were generated using the sum of the site TRU waste activity concentrations (Ci/m<sup>3</sup>) converted to activities (Ci) based on the site's anticipated (sum of the projected and stored) waste volume.

#### 3.4.2 Disposal Volumes and Activities for Selected Radionuclides by Waste Streams

The PA disposal volumes (m<sup>3</sup>) and disposal waste-stream-level radionuclide activities (Ci) for the CH- and RH-TRU waste streams are given in tables in Appendix E. The tables provide the site-specific radionuclide inventory estimates decayed from the waste stream assay year through the end of the 2006, 2033, 2133, 2383, 3033, 7033, and 12033 calendar years (Table E-1 through Table E-14, respectively).

### 3.4.3 WIPP Disposal Radionuclides

The waste profiles in Appendices A (WIPP-bound waste), B (WIPP emplaced waste), and C (WIPP potential waste) include unscaled radionuclide concentrations for each waste stream. These radionuclide concentrations ( $\text{Ci}/\text{m}^3$ ) have been decayed from the waste stream assay year through the end of CY 2006.

Table 3-15 presents the WIPP disposal roll-up of radionuclide concentrations in  $\text{Ci}/\text{m}^3$  and the total disposal activity (Ci) decayed through the end of CY 2006 for both CH- and RH-TRU waste.

Table 3-15 corresponds to Table 3-1 of the TWBIR, Revision 3, and Table 3.2 of the TWBIR-2004. A comparison of the radionuclides with the highest activity concentrations in this report to those reported in the TWBIR, Revision 3, and the TWBIR-2004 (CH-and RH-TRU waste), are presented in Appendix D.

The 2006 overall unscaled CH activity has increased by  $7.88\text{E}+05$  curies (18.3%; difference of CRA total activity and 2006 total activity divided by the CRA total activity) from the total activity reported in the PABC inventory. This increase is the result of better inventory reporting by the sites and data checks performed during data collection. Five radionuclides (Am-241, Pu-238, Pu-239, Pu-240, and Pu-241) made up 99 percent of the unscaled CH-TRU waste activity in the CCA. The same five radionuclides made up 97 percent of the unscaled CH-TRU waste activity in the CRA-2004, while five radionuclides (Am-241, Eu-155, Pu-238, Pu-239, and Pu-241) make up 96 percent of the total unscaled CH-TRU waste activity in this report (see Appendix D for further discussion on radionuclide changes).

The 2006 overall unscaled RH activity has increased by  $5.54\text{E}+05$  curies (32.9%) from the total activity reported in the PABC inventory. The RH-TRU inventory has higher activity report for 2006 for the same reasons CH-TRU radionuclide activity is higher. The five most abundant unscaled RH-TRU waste radionuclides (Ba-137m, Cs-137, Pu-241, Sr-90, and Y-90) have remained the same through the three reporting periods (the CCA, the CRA-2004, and this report). These five radionuclides made up 96 percent of the total unscaled RH-TRU waste activity in the CCA, 98 percent of the total unscaled RH-TRU waste activity in the CRA-2004, and 98 percent of the total unscaled RH-TRU waste activity in this report.

**Table 3-13. Unscaled CH Radionuclides (Ci) on a Site Basis Decayed Through 2006<sup>1</sup>**

| Nuclide | ANL-E    | ANL-W (MFC) | Army     | BAPL     | Hanford-RL | INL      | KAPL-NFS | LANL     | LBL      | LLNL     | NTS      | ORNL     | RFETS    | SNL-A    | SRS      | Total           |
|---------|----------|-------------|----------|----------|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------------|
| Ac-225  | 1.00E-02 | 6.37E-09    | 5.85E-12 | 1.82E-13 | 4.37E-04   | 6.97E-01 | 3.19E-06 | 1.26E-01 | 5.65E-07 | 6.02E-11 | 1.60E-03 | 1.52E-01 | 5.82E-05 | 2.00E-06 | 5.43E-03 | <b>9.92E-01</b> |
| Ac-227  | 1.45E-07 | 1.21E-09    | 8.99E-15 | 1.37E-10 | 3.50E-06   | 9.08E-04 | 1.48E-10 | 1.49E-01 | 3.73E-09 | 1.41E-03 | 1.07E-04 | 8.74E-02 | 4.71E-07 | 1.40E-03 | 2.71E-03 | <b>2.43E-01</b> |
| Ac-228  | 2.32E-05 | 6.38E-18    | --       | 2.98E-14 | 1.67E-04   | 2.64E-01 | 5.51E-06 | 2.27E-03 | 8.29E-10 | 3.18E-17 | 2.70E-15 | 7.99E-04 | 1.20E-09 | 4.40E-03 | 6.99E-04 | <b>2.73E-01</b> |
| Ag-109m | 1.46E-02 | --          | --       | --       | --         | --       | --       | 5.95E-04 | --       | --       | --       | 3.42E-11 | 1.17E-08 | 1.42E-05 | --       | <b>1.52E-02</b> |
| Ag-110  | 1.71E-05 | --          | --       | --       | --         | --       | --       | --       | --       | --       | --       | 1.24E-12 | --       | --       | --       | <b>1.71E-05</b> |
| Ag-110m | 1.30E-03 | --          | --       | --       | --         | --       | --       | --       | --       | --       | --       | 2.52E-02 | --       | --       | --       | <b>2.65E-02</b> |
| Am-241  | 1.04E+02 | 8.22E-02    | --       | 9.44E-03 | 1.95E+04   | 1.75E+05 | 4.46E+01 | 6.82E+04 | 1.65E-02 | 5.31E+03 | 3.63E+02 | 3.00E+03 | 1.16E+05 | 9.19E+00 | 5.30E+03 | <b>3.93E+05</b> |
| Am-242  | --       | --          | --       | --       | --         | --       | --       | --       | --       | 1.06E-02 | --       | --       | --       | 4.61E-02 | 4.34E-01 | <b>4.91E-01</b> |
| Am-242m | --       | --          | --       | --       | --         | --       | --       | --       | --       | 1.62E+00 | --       | --       | --       | 4.69E-02 | 4.41E-01 | <b>2.11E+00</b> |
| Am-243  | 1.89E+00 | --          | --       | 4.02E-05 | 6.05E-03   | 4.31E+01 | --       | 1.95E+00 | 1.87E-04 | 8.51E-02 | 5.86E-01 | 2.80E+00 | 1.08E-02 | 1.38E-02 | 1.57E+01 | <b>6.61E+01</b> |
| Am-245  | --       | --          | --       | --       | --         | --       | --       | 3.07E-14 | 4.15E-14 | --       | --       | 1.55E-11 | --       | --       | --       | <b>1.55E-11</b> |
| At-217  | 1.00E-02 | 6.37E-09    | 5.85E-12 | 1.82E-13 | 4.38E-04   | 6.97E-01 | 3.19E-06 | 1.26E-01 | 5.65E-07 | 6.03E-11 | 1.60E-03 | 1.52E-01 | 5.83E-05 | 2.00E-06 | 5.44E-03 | <b>9.92E-01</b> |
| Ba-133  | --       | --          | --       | --       | 1.23E-06   | --       | --       | 1.11E-05 | --       | --       | --       | 3.63E-07 | 1.07E-02 | --       | 7.58E-06 | <b>1.07E-02</b> |
| Ba-137m | 3.05E+00 | 3.90E+00    | --       | 1.85E+01 | 6.66E+03   | 8.12E+00 | --       | 4.58E+00 | --       | 1.97E-05 | 1.10E-02 | 3.48E+00 | 1.05E-02 | 6.64E+01 | 3.56E+02 | <b>7.12E+03</b> |
| Bi-210  | 1.97E-04 | 1.42E-11    | --       | 2.50E-12 | 1.41E-07   | 1.96E-05 | 7.64E-13 | 5.82E-01 | 1.68E-17 | 3.00E-12 | 5.11E-02 | 3.97E-01 | 7.17E-06 | 1.84E-02 | 1.18E-05 | <b>1.05E+00</b> |
| Bi-211  | 1.43E-07 | 1.20E-09    | 8.87E-15 | 1.35E-10 | 3.46E-06   | 8.74E-04 | 1.46E-10 | 1.48E-01 | 3.69E-09 | 6.46E-10 | 1.05E-04 | 8.63E-02 | 4.65E-07 | 1.38E-03 | 2.69E-03 | <b>2.39E-01</b> |
| Bi-212  | 1.75E-01 | 2.82E-18    | --       | 1.01E-05 | 6.28E-04   | 7.91E-02 | 9.50E-05 | 3.79E-01 | 4.76E-10 | 3.73E-03 | 6.83E-03 | 1.00E+01 | 1.28E-09 | 5.53E-03 | 1.30E-02 | <b>1.07E+01</b> |
| Bi-213  | 1.00E-02 | 6.36E-09    | 5.84E-12 | 1.82E-13 | 4.37E-04   | 6.96E-01 | 3.18E-06 | 1.25E-01 | 5.64E-07 | 6.02E-11 | 1.60E-03 | 1.51E-01 | 5.81E-05 | 2.00E-06 | 5.42E-03 | <b>9.90E-01</b> |
| Bi-214  | 2.05E-03 | 2.01E-10    | --       | 6.24E-11 | 7.78E-07   | 6.52E-05 | 1.93E-11 | 8.86E-01 | 4.46E-16 | 1.49E-10 | 1.10E-01 | 8.25E-01 | 7.96E-05 | 5.89E-02 | 5.82E-05 | <b>1.88E+00</b> |
| Bk-249  | --       | --          | --       | --       | --         | --       | --       | 2.12E-09 | 2.87E-09 | 1.94E-01 | --       | 1.07E-06 | --       | --       | --       | <b>1.94E-01</b> |
| Bk-250  | --       | --          | --       | --       | --         | --       | --       | --       | --       | --       | --       | 7.38E-12 | --       | --       | --       | <b>7.38E-12</b> |
| C-14    | --       | --          | --       | 5.38E-04 | 1.66E+00   | --       | --       | --       | --       | --       | 1.12E-04 | 2.54E-04 | 1.12E-05 | --       | --       | <b>1.66E+00</b> |
| Cd-109  | 1.48E-02 | --          | --       | --       | --         | --       | --       | 6.03E-04 | --       | 1.20E+00 | --       | 3.47E-11 | 1.18E-08 | 1.44E-05 | --       | <b>1.22E+00</b> |
| Ce-139  | --       | --          | --       | --       | --         | --       | --       | --       | --       | --       | --       | 3.75E-22 | --       | --       | --       | <b>3.75E-22</b> |
| Ce-141  | --       | --          | --       | --       | --         | --       | --       | --       | --       | --       | --       | 7.09E-01 | --       | --       | --       | <b>7.09E-01</b> |
| Ce-144  | --       | --          | --       | --       | --         | --       | --       | 7.58E-07 | --       | --       | --       | 2.29E-01 | --       | 1.01E-05 | 1.96E+01 | <b>1.99E+01</b> |
| Cf-249  | 1.68E-01 | --          | --       | 7.71E-13 | 1.97E-05   | --       | --       | 9.00E-03 | 2.02E-03 | 2.16E+02 | 5.07E-03 | 5.35E-01 | --       | --       | 5.94E-03 | <b>2.17E+02</b> |
| Cf-250  | --       | --          | --       | --       | --         | --       | --       | 1.72E-05 | --       | 8.89E-05 | 5.03E-02 | 4.49E-02 | --       | --       | 5.73E-02 | <b>1.53E-01</b> |
| Cf-251  | --       | --          | --       | 3.64E-14 | --         | --       | --       | 1.56E-03 | --       | 3.82E-04 | --       | 3.96E-04 | --       | --       | 1.13E-02 | <b>1.36E-02</b> |
| Cf-252  | 1.71E-04 | --          | --       | --       | --         | 1.07E-03 | --       | --       | --       | 3.04E-01 | 1.28E-02 | 8.85E-01 | 1.91E-04 | --       | 2.20E+01 | <b>2.32E+01</b> |
| Cl-36   | --       | --          | --       | --       | --         | --       | --       | 2.00E-03 | --       | --       | --       | --       | 3.52E-08 | --       | --       | <b>2.00E-03</b> |
| Cm-242  | --       | --          | --       | --       | --         | --       | --       | 2.35E-14 | --       | --       | --       | 2.47E-01 | --       | 3.87E-02 | 5.06E-01 | <b>7.91E-01</b> |
| Cm-243  | 5.39E-01 | --          | --       | 4.12E-05 | 2.39E-04   | 6.26E-05 | --       | 7.53E-01 | 3.21E-05 | 3.37E-02 | 7.74E-03 | 4.31E-02 | --       | 4.24E-01 | 1.74E-01 | <b>1.97E+00</b> |
| Cm-244  | 1.21E-01 | --          | --       | 2.21E-03 | --         | 7.85E+00 | --       | 7.20E+01 | --       | 2.68E+02 | 3.05E+01 | 1.14E+03 | 1.39E-07 | 4.83E+00 | 1.49E+03 | <b>3.02E+03</b> |
| Cm-245  | 4.13E-05 | --          | --       | 2.76E-07 | 3.22E-09   | --       | --       | 6.98E-04 | 8.30E-07 | 1.13E-02 | 1.07E-03 | 6.84E-03 | --       | --       | 1.59E-01 | <b>1.79E-01</b> |

**Table 3-13. Unscaled CH Radionuclides (Ci) on a Site Basis Decayed Through 2006<sup>1</sup>**  
**Continued**

| Nuclide | ANL-E    | ANL-W<br>(MFC) | Army     | BAPL     | Hanford-<br>RL | INL      | KAPL-<br>NFS | LANL     | LBL      | LLNL     | NTS      | ORNL     | RFETS    | SNL-A    | SRS      | Total           |
|---------|----------|----------------|----------|----------|----------------|----------|--------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------------|
| Cm-246  | --       | --             | --       | 4.70E-08 | --             | --       | --           | 5.95E-02 | 4.99E-06 | --       | 2.61E-04 | 1.38E+00 | --       | --       | 2.31E-01 | <b>1.67E+00</b> |
| Cm-247  | --       | --             | --       | 1.08E-13 | --             | --       | --           | 1.01E-07 | --       | 7.11E-07 | --       | 6.96E-08 | --       | --       | 3.91E-02 | <b>3.91E-02</b> |
| Cm-248  | 1.54E-09 | --             | --       | 1.95E-13 | --             | 6.91E-07 | --           | --       | 1.96E-06 | 3.56E-03 | 1.84E-05 | 4.32E-02 | 8.59E-09 | --       | 9.04E-05 | <b>4.69E-02</b> |
| Cm-250  | --       | --             | --       | --       | --             | --       | --           | --       | --       | --       | --       | 6.98E-11 | --       | --       | --       | <b>6.98E-11</b> |
| Co-60   | 2.41E-01 | --             | --       | 5.58E-01 | 3.77E-06       | --       | --           | 2.70E-02 | --       | 3.85E-04 | --       | 1.59E-02 | 5.25E-05 | 2.82E-02 | 1.41E-04 | <b>8.71E-01</b> |
| Cs-134  | 3.23E-03 | --             | --       | --       | --             | --       | --           | 8.78E-09 | --       | --       | --       | 1.29E-01 | --       | 4.90E-03 | 7.59E+02 | <b>7.59E+02</b> |
| Cs-137  | 3.26E+00 | 4.17E+00       | --       | 1.98E+01 | 7.14E+03       | 8.68E+00 | --           | 5.06E+00 | --       | 1.12E+00 | 1.18E-02 | 5.40E+00 | 1.12E-02 | 7.10E+01 | 3.81E+02 | <b>7.64E+03</b> |
| Es-254  | --       | --             | --       | --       | --             | --       | --           | --       | --       | --       | --       | 3.56E-12 | --       | --       | --       | <b>3.56E-12</b> |
| Eu-150  | --       | --             | --       | --       | --             | --       | --           | --       | --       | --       | --       | 2.26E-03 | --       | --       | --       | <b>2.26E-03</b> |
| Eu-152  | 3.53E-01 | --             | --       | 7.71E-01 | 1.42E-05       | --       | --           | 1.83E-05 | 7.74E-09 | 2.06E-01 | 3.30E-01 | 4.86E-01 | 6.70E-05 | --       | 2.15E-04 | <b>2.15E+00</b> |
| Eu-154  | 3.92E-03 | --             | --       | 6.85E-01 | 4.00E-05       | --       | --           | 3.64E-05 | --       | 7.42E+04 | 1.09E-01 | 3.61E-01 | 4.92E-07 | 9.37E-02 | 1.09E+02 | <b>7.43E+04</b> |
| Eu-155  | --       | --             | --       | --       | --             | --       | --           | 2.16E-03 | --       | 9.59E-05 | --       | 1.98E-01 | 4.85E-08 | 1.03E-03 | 9.55E+05 | <b>9.55E+05</b> |
| Fe-55   | --       | --             | --       | --       | --             | --       | --           | 4.43E-07 | --       | --       | --       | --       | 1.24E-04 | --       | --       | <b>1.25E-04</b> |
| Fr-221  | 1.00E-02 | 6.37E-09       | 5.85E-12 | 1.82E-13 | 4.37E-04       | 6.96E-01 | 3.19E-06     | 1.26E-01 | 5.64E-07 | 6.02E-11 | 1.60E-03 | 1.52E-01 | 5.82E-05 | 2.00E-06 | 5.43E-03 | <b>9.91E-01</b> |
| Fr-223  | 1.98E-09 | 1.65E-11       | 1.23E-16 | 1.86E-12 | 4.78E-08       | 1.21E-05 | 2.02E-12     | 2.04E-03 | 5.10E-11 | 8.92E-12 | 1.46E-06 | 1.19E-03 | 6.42E-09 | 1.91E-05 | 3.70E-05 | <b>3.30E-03</b> |
| Gd-152  | 1.99E-15 | --             | --       | 5.95E-15 | 1.02E-19       | --       | --           | 6.69E-19 | 7.66E-23 | 5.75E-19 | 1.99E-14 | 2.86E-14 | 3.77E-19 | --       | 3.87E-19 | <b>5.65E-14</b> |
| H-3     | --       | --             | --       | --       | 1.51E+00       | --       | --           | 1.70E+03 | --       | 1.37E-06 | 1.82E-02 | 1.41E-03 | 7.52E+00 | 1.42E-02 | 3.72E+02 | <b>2.08E+03</b> |
| Ho-166m | --       | --             | --       | --       | --             | --       | --           | --       | --       | --       | --       | 5.01E-05 | --       | --       | --       | <b>5.01E-05</b> |
| I-129   | --       | --             | --       | 7.07E-06 | --             | --       | --           | 1.20E-06 | --       | --       | --       | --       | --       | --       | --       | <b>8.27E-06</b> |
| K-40    | 3.93E-03 | --             | --       | --       | 4.42E-04       | 3.12E-06 | --           | --       | --       | --       | --       | --       | --       | --       | --       | <b>4.38E-03</b> |
| Kr-85   | --       | --             | --       | --       | --             | --       | --           | --       | --       | --       | 4.92E-02 | --       | 2.21E-05 | 2.44E-01 | 2.23E+02 | <b>2.23E+02</b> |
| Mn-54   | 2.63E-03 | --             | --       | --       | --             | --       | --           | --       | --       | --       | --       | 5.76E-14 | 1.61E-11 | --       | --       | <b>2.63E-03</b> |
| Na-22   | 3.41E-02 | --             | --       | --       | 8.89E-05       | --       | --           | 1.44E-01 | --       | 4.56E-05 | --       | 5.24E-09 | 3.85E-04 | --       | 2.52E-02 | <b>2.03E-01</b> |
| Nb-93m  | --       | --             | --       | 2.01E-04 | --             | --       | --           | --       | --       | --       | --       | --       | --       | --       | --       | <b>2.01E-04</b> |
| Nb-94   | --       | --             | --       | --       | 3.80E-06       | --       | --           | --       | --       | --       | --       | --       | --       | --       | 1.21E-07 | <b>3.92E-06</b> |
| Nb-95   | --       | --             | --       | --       | --             | --       | --           | 1.17E-07 | --       | --       | --       | --       | --       | --       | --       | <b>1.17E-07</b> |
| Ni-59   | --       | --             | --       | 7.77E-02 | --             | --       | --           | --       | --       | --       | --       | --       | --       | --       | --       | <b>7.77E-02</b> |
| Ni-63   | --       | --             | --       | 3.67E+00 | --             | --       | --           | --       | --       | --       | --       | 1.30E-04 | 1.21E-01 | --       | --       | <b>3.79E+00</b> |
| Np-237  | 4.31E-01 | 2.16E-07       | 3.95E-05 | 5.73E-05 | 4.60E-01       | 3.17E+00 | 5.75E-05     | 8.43E-01 | 6.66E-05 | 7.97E-02 | 2.32E-02 | 5.17E-01 | 1.13E+00 | 1.41E-01 | 1.41E+01 | <b>2.09E+01</b> |
| Np-238  | --       | --             | --       | --       | --             | --       | --           | --       | --       | --       | --       | --       | --       | 2.32E-04 | 2.18E-03 | <b>2.41E-03</b> |
| Np-239  | 1.86E+00 | --             | --       | 3.97E-05 | 5.97E-03       | 4.26E+01 | --           | 1.92E+00 | 1.85E-04 | 1.56E-02 | 5.79E-01 | 2.80E+00 | 1.06E-02 | 1.36E-02 | 1.55E+01 | <b>6.52E+01</b> |
| Np-240m | 2.03E-17 | --             | --       | 6.79E-13 | --             | 7.18E-14 | --           | 2.99E-04 | 7.58E-14 | --       | 4.52E-07 | 5.82E-06 | 1.82E-16 | --       | 5.21E-13 | <b>3.05E-04</b> |
| Pa-231  | 6.42E-07 | 9.94E-09       | 3.84E-14 | 2.24E-09 | 1.47E-05       | 2.46E-03 | 2.42E-09     | 1.53E-02 | 2.54E-08 | 1.12E-02 | 2.66E-04 | 1.79E-01 | 6.83E-06 | 5.63E-03 | 5.44E-04 | <b>2.14E-01</b> |
| Pa-233  | 4.27E-01 | 2.14E-07       | 3.92E-05 | 5.68E-05 | 4.50E-01       | 3.09E+00 | 5.70E-05     | 8.32E-01 | 6.60E-05 | 7.32E-02 | 2.30E-02 | 5.12E-01 | 1.12E+00 | 1.39E-01 | 1.39E+01 | <b>2.06E+01</b> |
| Pa-234  | 8.97E-05 | 2.69E-10       | --       | 1.57E-10 | 1.45E-03       | 6.73E-02 | 2.91E-06     | 1.86E-03 | 2.52E-06 | 4.55E-06 | 8.16E-05 | 7.98E-05 | 1.82E-03 | 1.16E-05 | 3.27E-04 | <b>7.31E-02</b> |

**Table 3-13. Unscaled CH Radionuclides (Ci) on a Site Basis Decayed Through 2006<sup>1</sup>**  
**Continued**

| Nuclide | ANL-E    | ANL-W<br>(MFC) | Army     | BAPL     | Hanford-<br>RL | INL      | KAPL-<br>NFS | LANL     | LBL      | LLNL     | NTS      | ORNL     | RFETS    | SNL-A    | SRS      | Total           |
|---------|----------|----------------|----------|----------|----------------|----------|--------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------------|
| Pa-234m | 6.90E-02 | 2.07E-07       | --       | 1.21E-07 | 1.11E+00       | 5.18E+01 | 2.24E-03     | 1.43E+00 | 1.93E-03 | 3.50E-03 | 6.27E-02 | 6.14E-02 | 1.40E+00 | 8.90E-03 | 2.52E-01 | <b>5.62E+01</b> |
| Pb-209  | 1.00E-02 | 6.37E-09       | 5.85E-12 | 1.82E-13 | 4.37E-04       | 6.96E-01 | 3.19E-06     | 1.26E-01 | 5.65E-07 | 6.02E-11 | 1.60E-03 | 1.52E-01 | 5.82E-05 | 2.00E-06 | 5.43E-03 | <b>9.91E-01</b> |
| Pb-210  | 1.99E-04 | 1.43E-11       | --       | 2.53E-12 | 1.42E-07       | 1.98E-05 | 7.73E-13     | 5.89E-01 | 1.70E-17 | 3.04E-12 | 5.17E-02 | 4.02E-01 | 7.26E-06 | 1.86E-02 | 1.19E-05 | <b>1.06E+00</b> |
| Pb-211  | 1.43E-07 | 1.20E-09       | 8.89E-15 | 1.35E-10 | 3.46E-06       | 8.75E-04 | 1.46E-10     | 1.48E-01 | 3.69E-09 | 6.46E-10 | 1.05E-04 | 8.64E-02 | 4.65E-07 | 1.39E-03 | 2.69E-03 | <b>2.40E-01</b> |
| Pb-212  | 1.74E-01 | 2.82E-18       | --       | 1.01E-05 | 6.26E-04       | 7.88E-02 | 9.47E-05     | 3.78E-01 | 4.75E-10 | 6.08E-18 | 6.80E-03 | 1.00E+01 | 1.28E-09 | 5.52E-03 | 1.30E-02 | <b>1.07E+01</b> |
| Pb-214  | 2.05E-03 | 2.02E-10       | --       | 6.25E-11 | 7.79E-07       | 6.53E-05 | 1.93E-11     | 8.88E-01 | 4.47E-16 | 1.50E-10 | 1.10E-01 | 8.27E-01 | 7.98E-05 | 5.89E-02 | 5.83E-05 | <b>1.89E+00</b> |
| Pm-147  | --       | --             | --       | 3.29E-01 | --             | --       | --           | 1.53E-04 | --       | --       | --       | 1.00E-02 | 5.34E-05 | 2.38E-01 | 5.41E+02 | <b>5.42E+02</b> |
| Po-210  | 1.66E-04 | 1.43E-11       | --       | 2.53E-12 | 1.42E-07       | 1.98E-05 | 7.73E-13     | 5.88E-01 | 1.70E-17 | 1.53E-12 | 5.16E-02 | 4.02E-01 | 5.96E-06 | 1.86E-02 | 1.18E-05 | <b>1.06E+00</b> |
| Po-211  | 4.36E-10 | 3.65E-12       | 2.71E-17 | 4.11E-13 | 1.06E-08       | 2.67E-06 | 4.45E-13     | 4.51E-04 | 1.13E-11 | 1.97E-12 | 3.22E-07 | 2.63E-04 | 1.42E-09 | 4.23E-06 | 8.20E-06 | <b>7.30E-04</b> |
| Po-212  | 1.11E-01 | 1.80E-18       | --       | 6.44E-06 | 4.00E-04       | 5.04E-02 | 6.05E-05     | 2.41E-01 | 3.03E-10 | 3.88E-18 | 4.35E-03 | 6.39E+00 | 8.16E-10 | 3.53E-03 | 8.31E-03 | <b>6.81E+00</b> |
| Po-213  | 9.81E-03 | 6.23E-09       | 5.72E-12 | 1.78E-13 | 4.28E-04       | 6.81E-01 | 3.12E-06     | 1.23E-01 | 5.52E-07 | 5.89E-11 | 1.56E-03 | 1.48E-01 | 5.69E-05 | 1.96E-06 | 5.31E-03 | <b>9.70E-01</b> |
| Po-214  | 2.05E-03 | 2.02E-10       | --       | 6.24E-11 | 7.79E-07       | 6.53E-05 | 1.93E-11     | 8.87E-01 | 4.47E-16 | 1.50E-10 | 1.10E-01 | 8.26E-01 | 7.97E-05 | 5.89E-02 | 5.83E-05 | <b>1.88E+00</b> |
| Po-215  | 1.43E-07 | 1.20E-09       | 8.88E-15 | 1.35E-10 | 3.46E-06       | 8.75E-04 | 1.46E-10     | 1.48E-01 | 3.69E-09 | 6.46E-10 | 1.06E-04 | 8.64E-02 | 4.65E-07 | 1.39E-03 | 2.69E-03 | <b>2.40E-01</b> |
| Po-216  | 1.74E-01 | 2.81E-18       | --       | 1.01E-05 | 6.26E-04       | 7.88E-02 | 9.47E-05     | 3.77E-01 | 4.74E-10 | 6.07E-18 | 6.80E-03 | 1.00E+01 | 1.28E-09 | 5.51E-03 | 1.30E-02 | <b>1.07E+01</b> |
| Po-218  | 2.02E-03 | 1.98E-10       | --       | 6.14E-11 | 7.66E-07       | 6.42E-05 | 1.90E-11     | 8.72E-01 | 4.39E-16 | 1.47E-10 | 1.08E-01 | 8.12E-01 | 7.84E-05 | 5.79E-02 | 5.73E-05 | <b>1.85E+00</b> |
| Pr-144  | --       | --             | --       | --       | --             | --       | --           | 7.43E-07 | --       | --       | --       | 9.22E-09 | --       | 9.89E-06 | 1.92E+01 | <b>1.92E+01</b> |
| Pu-236  | 4.05E-08 | --             | --       | --       | --             | 5.66E-05 | --           | 2.38E-11 | --       | 8.89E-04 | --       | 7.69E-13 | --       | --       | --       | <b>9.45E-04</b> |
| Pu-238  | 7.49E+01 | 1.10E+02       | --       | 9.16E-01 | 1.18E+05       | 7.90E+04 | 7.24E+00     | 1.93E+05 | 4.40E-05 | 1.31E+03 | 1.34E+02 | 2.76E+03 | 1.06E+04 | 1.87E+00 | 1.07E+06 | <b>1.48E+06</b> |
| Pu-239  | 2.13E+02 | 8.85E+01       | 5.05E-03 | 7.37E-04 | 5.83E+04       | 8.38E+04 | 8.90E+01     | 8.80E+04 | 7.90E-04 | 8.23E+02 | 1.83E+03 | 1.12E+03 | 2.23E+05 | 7.98E+00 | 1.80E+04 | <b>4.75E+05</b> |
| Pu-240  | 1.27E+02 | 5.32E-01       | --       | 1.51E-03 | 1.65E+04       | 2.02E+04 | 3.00E+01     | 1.36E+04 | 1.95E-04 | 2.33E+02 | 1.78E+02 | 1.22E+03 | 5.60E+04 | 1.16E+00 | 4.39E+03 | <b>1.12E+05</b> |
| Pu-241  | 1.94E+02 | 3.32E-01       | --       | 1.33E-01 | 2.82E+05       | 1.24E+05 | 1.29E+02     | 3.58E+05 | 7.86E-05 | 3.05E+03 | 2.39E+03 | 4.04E+04 | 6.12E+05 | 1.11E+01 | 1.55E+05 | <b>1.58E+06</b> |
| Pu-242  | 5.81E-02 | 6.71E-06       | --       | 1.17E-05 | 3.92E+00       | 1.62E+00 | 2.32E-04     | 2.17E+01 | 1.71E-05 | 6.05E-02 | 5.37E-02 | 6.13E-01 | 6.08E+00 | 7.60E-05 | 4.88E+00 | <b>3.89E+01</b> |
| Pu-243  | --       | --             | --       | 1.06E-13 | --             | --       | --           | 9.98E-08 | --       | --       | --       | 6.88E-08 | --       | --       | 3.86E-02 | <b>3.86E-02</b> |
| Pu-244  | 2.01E-17 | --             | --       | 6.73E-13 | --             | 7.11E-14 | --           | 2.96E-04 | 7.51E-14 | --       | 4.47E-07 | 5.76E-06 | 1.81E-16 | --       | 5.16E-13 | <b>3.03E-04</b> |
| Ra-223  | 1.45E-07 | 1.21E-09       | 8.98E-15 | 1.36E-10 | 3.50E-06       | 8.85E-04 | 1.48E-10     | 1.50E-01 | 3.73E-09 | 6.53E-10 | 1.07E-04 | 8.73E-02 | 4.71E-07 | 1.40E-03 | 2.72E-03 | <b>2.42E-01</b> |
| Ra-224  | 1.74E-01 | 2.81E-18       | --       | 1.01E-05 | 6.25E-04       | 7.87E-02 | 9.45E-05     | 3.77E-01 | 4.74E-10 | 6.07E-18 | 6.79E-03 | 9.99E+00 | 1.27E-09 | 5.51E-03 | 1.30E-02 | <b>1.06E+01</b> |
| Ra-225  | 1.00E-02 | 6.37E-09       | 5.85E-12 | 1.82E-13 | 4.38E-04       | 6.97E-01 | 3.19E-06     | 1.26E-01 | 5.65E-07 | 6.03E-11 | 1.60E-03 | 1.52E-01 | 5.82E-05 | 2.00E-06 | 5.43E-03 | <b>9.92E-01</b> |
| Ra-226  | 2.08E-03 | 2.04E-10       | --       | 6.32E-11 | 7.88E-07       | 6.69E-05 | 1.95E-11     | 8.97E-01 | 4.52E-16 | 1.51E-10 | 1.11E-01 | 8.36E-01 | 8.07E-05 | 5.96E-02 | 5.90E-05 | <b>1.91E+00</b> |
| Ra-228  | 2.73E-05 | 7.53E-18       | --       | 3.52E-14 | 1.98E-04       | 3.12E-01 | 6.51E-06     | 2.68E-03 | 9.79E-10 | 3.75E-17 | 3.19E-15 | 9.43E-04 | 1.42E-09 | 5.20E-03 | 8.25E-04 | <b>3.22E-01</b> |
| Rh-106  | --       | --             | --       | --       | --             | --       | --           | 7.51E-10 | --       | --       | --       | 2.57E-06 | --       | 6.87E-06 | 8.57E+01 | <b>8.57E+01</b> |
| Rn-219  | 1.43E-07 | 1.20E-09       | 8.87E-15 | 1.35E-10 | 3.46E-06       | 8.74E-04 | 1.46E-10     | 1.48E-01 | 3.69E-09 | 6.46E-10 | 1.05E-04 | 8.63E-02 | 4.65E-07 | 1.38E-03 | 2.69E-03 | <b>2.39E-01</b> |
| Rn-220  | 1.74E-01 | 2.81E-18       | --       | 1.01E-05 | 6.26E-04       | 7.88E-02 | 9.47E-05     | 3.77E-01 | 4.74E-10 | 6.07E-18 | 6.80E-03 | 1.00E+01 | 1.28E-09 | 5.51E-03 | 1.30E-02 | <b>1.07E+01</b> |
| Rn-222  | 2.06E-03 | 2.02E-10       | --       | 6.25E-11 | 7.80E-07       | 6.53E-05 | 1.93E-11     | 8.88E-01 | 4.47E-16 | 1.50E-10 | 1.10E-01 | 8.27E-01 | 7.98E-05 | 5.90E-02 | 5.84E-05 | <b>1.89E+00</b> |
| Ru-103  | --       | --             | --       | --       | --             | --       | --           | --       | --       | --       | --       | 3.34E-01 | --       | --       | --       | <b>3.34E-01</b> |
| Ru-106  | --       | --             | --       | --       | --             | --       | --           | 7.58E-10 | --       | --       | --       | 1.51E+00 | --       | 6.95E-06 | 8.66E+01 | <b>8.81E+01</b> |



**Table 3-13. Unscaled CH Radionuclides (Ci) on a Site Basis Decayed Through 2006<sup>1</sup>**  
**Continued**

| Nuclide | ANL-E    | ANL-W<br>(MFC) | Army     | BAPL     | Hanford-<br>RL | INL      | KAPL-<br>NFS | LANL     | LBL      | LLNL     | NTS      | ORNL     | RFETS    | SNL-A    | SRS      | Total           |
|---------|----------|----------------|----------|----------|----------------|----------|--------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------------|
| Sb-125  | 5.73E-06 | --             | --       | --       | --             | --       | --           | 1.53E-04 | --       | 2.12E-06 | --       | 8.95E-02 | 1.32E-08 | --       | 5.69E-03 | <b>9.54E-02</b> |
| Sb-126  | --       | --             | --       | 1.36E-05 | --             | --       | --           | --       | --       | --       | --       | --       | --       | --       | --       | <b>1.36E-05</b> |
| Sb-126m | --       | --             | --       | 9.72E-05 | --             | --       | --           | --       | --       | --       | --       | --       | --       | --       | --       | <b>9.72E-05</b> |
| Sc-46   | --       | --             | --       | --       | --             | --       | --           | 2.34E-25 | --       | --       | --       | --       | --       | --       | --       | <b>2.34E-25</b> |
| Se-75   | --       | --             | --       | --       | --             | --       | --           | --       | --       | --       | --       | --       | 1.06E-09 | --       | --       | <b>1.06E-09</b> |
| Se-79   | --       | --             | --       | 1.34E-04 | --             | --       | --           | --       | --       | --       | --       | --       | --       | --       | --       | <b>1.34E-04</b> |
| Sm-147  | --       | --             | --       | 1.51E-11 | --             | --       | --           | 2.12E-12 | --       | --       | --       | 6.31E-11 | 1.58E-15 | 5.71E-11 | 4.35E-09 | <b>4.49E-09</b> |
| Sm-151  | --       | --             | --       | 1.01E-01 | --             | --       | --           | 7.64E-04 | --       | --       | --       | 1.17E-01 | --       | 2.65E-01 | 2.97E+00 | <b>3.45E+00</b> |
| Sn-126  | --       | --             | --       | 9.73E-05 | --             | --       | --           | --       | --       | --       | --       | --       | --       | --       | --       | <b>9.73E-05</b> |
| Sr-90   | 2.92E+00 | 2.07E+01       | --       | 1.98E+01 | 1.20E+03       | 7.18E-03 | --           | 2.08E+00 | --       | 3.02E+00 | 4.25E-04 | 3.04E+01 | 3.34E-02 | 6.69E+01 | 3.80E+02 | <b>1.72E+03</b> |
| Tc-99   | 2.53E+00 | --             | --       | 4.76E-03 | 4.50E-04       | --       | 1.41E-02     | --       | --       | 6.04E-05 | --       | 9.35E+00 | 6.02E-08 | 1.59E-03 | --       | <b>1.19E+01</b> |
| Te-123  | --       | --             | --       | --       | --             | --       | --           | --       | --       | --       | --       | 2.17E-18 | --       | --       | --       | <b>2.17E-18</b> |
| Te-123m | --       | --             | --       | --       | --             | --       | --           | --       | --       | --       | --       | 2.02E-22 | --       | --       | --       | <b>2.02E-22</b> |
| Te-125m | 1.39E-06 | --             | --       | --       | --             | --       | --           | 3.70E-05 | --       | --       | --       | 2.80E-04 | 3.19E-09 | --       | 5.32E+00 | <b>5.32E+00</b> |
| Th-227  | 1.41E-07 | 1.18E-09       | 8.75E-15 | 1.33E-10 | 3.41E-06       | 8.61E-04 | 1.44E-10     | 1.46E-01 | 3.63E-09 | 6.36E-10 | 1.04E-04 | 8.51E-02 | 4.58E-07 | 1.36E-03 | 2.65E-03 | <b>2.36E-01</b> |
| Th-228  | 1.76E-01 | 2.85E-18       | --       | 1.02E-05 | 6.33E-04       | 7.97E-02 | 9.57E-05     | 3.82E-01 | 4.80E-10 | 2.88E-04 | 6.88E-03 | 1.01E+01 | 1.29E-09 | 5.57E-03 | 1.31E-02 | <b>1.08E+01</b> |
| Th-229  | 1.00E-02 | 6.38E-09       | 5.86E-12 | 1.82E-13 | 4.38E-04       | 6.98E-01 | 3.19E-06     | 1.26E-01 | 5.66E-07 | 2.90E-04 | 1.60E-03 | 1.52E-01 | 5.83E-05 | 2.00E-06 | 5.44E-03 | <b>9.94E-01</b> |
| Th-230  | 2.96E-06 | 1.45E-07       | --       | 7.29E-08 | 1.86E-04       | 8.11E-03 | 2.30E-08     | 1.06E-01 | 6.26E-13 | 6.77E-05 | 7.13E-06 | 6.35E-03 | 8.24E-05 | 1.52E-05 | 9.80E-03 | <b>1.30E-01</b> |
| Th-231  | 2.85E-03 | 5.63E-05       | 1.33E-10 | 2.61E-05 | 7.48E-02       | 5.34E+00 | 2.85E-05     | 7.90E-02 | 7.81E-09 | 4.91E-04 | 9.89E-01 | 5.00E-03 | 8.27E-02 | 1.21E-02 | 3.66E-02 | <b>6.62E+00</b> |
| Th-232  | 2.69E-05 | 2.71E-17       | --       | 1.17E-13 | 4.33E-03       | 1.43E+00 | 1.65E-05     | 2.48E-03 | 2.08E-09 | 1.17E-06 | 6.64E-15 | 9.12E-04 | 4.56E-09 | 4.65E-03 | 4.07E-03 | <b>1.45E+00</b> |
| Th-234  | 6.91E-02 | 2.07E-07       | --       | 1.21E-07 | 1.11E+00       | 5.19E+01 | 2.24E-03     | 1.44E+00 | 1.94E-03 | 3.50E-03 | 6.28E-02 | 6.15E-02 | 1.40E+00 | 8.91E-03 | 2.52E-01 | <b>5.63E+01</b> |
| Tl-204  | --       | --             | --       | --       | --             | --       | --           | --       | --       | --       | --       | 1.53E-06 | 1.29E-06 | --       | --       | <b>2.82E-06</b> |
| Tl-207  | 1.42E-07 | 1.19E-09       | 8.84E-15 | 1.34E-10 | 3.44E-06       | 8.70E-04 | 1.45E-10     | 1.47E-01 | 3.67E-09 | 6.43E-10 | 1.05E-04 | 8.59E-02 | 4.63E-07 | 1.38E-03 | 2.67E-03 | <b>2.38E-01</b> |
| Tl-208  | 6.27E-02 | 1.01E-18       | --       | 3.63E-06 | 2.25E-04       | 2.84E-02 | 3.41E-05     | 1.36E-01 | 1.71E-10 | 1.95E-03 | 2.45E-03 | 3.60E+00 | 4.60E-10 | 1.99E-03 | 4.68E-03 | <b>3.84E+00</b> |
| Tl-209  | 2.20E-04 | 1.40E-10       | 1.29E-13 | 4.00E-15 | 9.62E-06       | 1.53E-02 | 7.01E-08     | 2.76E-03 | 1.24E-08 | 1.32E-12 | 3.51E-05 | 3.34E-03 | 1.28E-06 | 4.39E-08 | 1.19E-04 | <b>2.18E-02</b> |
| U-232   | 1.71E-01 | --             | --       | 1.31E-05 | 8.53E-04       | 1.61E-04 | 9.09E-05     | 3.69E-01 | --       | 4.75E-03 | 6.68E-03 | 9.82E+00 | --       | --       | 2.60E-02 | <b>1.04E+01</b> |
| U-233   | 9.09E-02 | 8.19E-06       | 4.63E-09 | 9.72E-10 | 5.63E+00       | 4.94E+02 | 8.52E-03     | 4.26E+01 | 1.21E-03 | 1.44E+00 | 1.29E+00 | 7.72E+01 | 1.07E-01 | 2.38E-03 | 2.35E+00 | <b>6.25E+02</b> |
| U-234   | 8.83E-02 | 3.26E-03       | --       | 2.03E-03 | 1.12E+01       | 3.27E+01 | 6.82E-04     | 1.83E+01 | 2.78E-08 | 3.11E-02 | 1.16E-01 | 2.02E+01 | 2.20E+00 | 1.88E-01 | 7.23E+01 | <b>1.57E+02</b> |
| U-235   | 2.89E-03 | 5.70E-05       | 1.35E-10 | 2.65E-05 | 9.27E-01       | 6.41E+00 | 2.89E-05     | 8.00E-02 | 7.91E-09 | 1.28E-03 | 1.00E+00 | 5.07E-03 | 8.37E-02 | 1.23E-02 | 3.72E-02 | <b>8.56E+00</b> |
| U-236   | 4.26E-05 | 1.31E-07       | --       | 3.02E-04 | 1.98E-03       | 9.36E-01 | 3.55E-06     | 8.74E-03 | 2.90E-11 | 9.97E-06 | 2.20E-05 | 1.78E-01 | 9.73E-03 | 1.34E-07 | 9.02E-02 | <b>1.23E+00</b> |
| U-237   | 4.77E-03 | 8.15E-06       | --       | 3.26E-06 | 4.11E+00       | 2.88E+00 | 3.18E-03     | 8.78E+00 | 1.93E-09 | 5.30E-02 | 5.88E-02 | 9.93E-01 | 1.50E+01 | 1.36E-04 | 3.80E+00 | <b>3.57E+01</b> |
| U-238   | 6.98E-02 | 2.09E-07       | --       | 1.22E-07 | 1.66E+00       | 5.24E+01 | 2.26E-03     | 1.45E+00 | 1.95E-03 | 6.91E-03 | 6.34E-02 | 6.20E-02 | 1.42E+00 | 9.00E-03 | 2.54E-01 | <b>5.74E+01</b> |
| U-240   | 1.99E-17 | --             | --       | 6.66E-13 | --             | 7.04E-14 | --           | 2.93E-04 | 7.43E-14 | --       | 4.43E-07 | 5.70E-06 | 1.79E-16 | --       | 5.11E-13 | <b>2.99E-04</b> |
| Y-90    | 2.88E+00 | 2.04E+01       | --       | 1.95E+01 | 1.18E+03       | 6.06E-03 | --           | 1.92E+00 | --       | 3.02E+00 | 4.20E-04 | 1.78E+01 | 3.30E-02 | 6.61E+01 | 3.76E+02 | <b>1.68E+03</b> |

**Table 3-13. Unscaled CH Radionuclides (Ci) on a Site Basis Decayed Through 2006<sup>1</sup>**  
**Continued**

| Nuclide      | ANL-E           | ANL-W<br>(MFC)  | Army            | BAPL            | Hanford-<br>RL  | INL             | KAPL-<br>NFS    | LANL            | LBL             | LLNL            | NTS             | ORNL            | RFETS           | SNL-A           | SRS             | Total           |
|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Zn-65        | 4.99E-04        | --              | --              | --              | --              | --              | --              | 3.85E-08        | --              | --              | --              | 4.99E-13        | --              | --              | --              | <b>4.99E-04</b> |
| Zr-93        | --              | --              | --              | 1.14E-03        | --              | --              | --              | --              | --              | --              | --              | --              | --              | --              | --              | <b>1.14E-03</b> |
| Zr-95        | --              | --              | --              | --              | --              | --              | --              | --              | --              | --              | --              | 1.81E-01        | --              | --              | --              | <b>1.81E-01</b> |
| <b>Total</b> | <b>7.36E+02</b> | <b>2.48E+02</b> | <b>5.13E-03</b> | <b>8.49E+01</b> | <b>5.11E+05</b> | <b>4.83E+05</b> | <b>3.00E+02</b> | <b>7.23E+05</b> | <b>2.72E-02</b> | <b>8.54E+04</b> | <b>4.94E+03</b> | <b>5.00E+04</b> | <b>1.02E+06</b> | <b>3.09E+02</b> | <b>2.21E+06</b> | <b>5.09E+06</b> |

<sup>1</sup>Data Source: CID Data Version D.6.06, LANL-CO 2008.

**Table 3-14. Unscaled RH Radionuclides (Ci) on a Site Basis Decayed Through 2006<sup>1</sup>**

| Nuclide | ANL-E    | ANL-W (MFC) | BAPL     | Hanford  | INL      | KAPL-S   | LANL     | ORNL     | SNL-A    | SRS      | Total           |
|---------|----------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------------|
| Ac-225  | 1.91E-07 | 1.46E-04    | 3.10E-02 | 2.98E-09 | 2.33E-06 | 1.29E-09 | 3.37E-13 | 5.67E+00 | 6.37E-11 | 1.36E-09 | <b>5.70E+00</b> |
| Ac-227  | 1.33E-08 | 8.01E-08    | 1.11E-01 | 1.28E-05 | 1.70E-08 | 6.39E-08 | 1.75E-06 | 4.25E+01 | 5.83E-08 | 9.59E-10 | <b>4.26E+01</b> |
| Ac-228  | 5.37E-16 | 1.11E-15    | 2.56E-03 | 2.31E-05 | 1.12E-14 | 4.28E-11 | 7.79E-15 | 3.04E+00 | 2.66E-17 | 8.85E-14 | <b>3.04E+00</b> |
| Ag-110  | --       | --          | --       | --       | --       | --       | --       | 2.89E-13 | --       | --       | <b>2.89E-13</b> |
| Ag-110m | --       | --          | --       | --       | --       | --       | --       | 2.20E-11 | --       | --       | <b>2.20E-11</b> |
| Am-241  | 3.64E+00 | 8.50E+00    | 4.15E+00 | 1.71E+04 | 2.06E+03 | 3.72E-02 | 2.18E+00 | 1.32E+03 | 9.07E+01 | 7.46E+01 | <b>2.07E+04</b> |
| Am-242  | --       | 1.61E-03    | 6.76E-03 | 7.16E-04 | --       | --       | --       | --       | --       | 1.80E-01 | <b>1.89E-01</b> |
| Am-242m | --       | 1.64E-03    | 6.88E-03 | 7.28E-04 | --       | --       | --       | --       | --       | 1.83E-01 | <b>1.93E-01</b> |
| Am-243  | 1.13E-05 | 1.72E-04    | 2.60E-02 | 1.24E-01 | --       | 6.14E-05 | --       | 5.42E-02 | --       | 1.41E+00 | <b>1.61E+00</b> |
| At-217  | 1.91E-07 | 1.46E-04    | 3.10E-02 | 2.98E-09 | 2.34E-06 | 1.29E-09 | 3.37E-13 | 5.67E+00 | 6.37E-11 | 1.37E-09 | <b>5.71E+00</b> |
| Ba-133  | --       | --          | 4.64E-07 | --       | --       | --       | --       | --       | --       | --       | <b>4.64E-07</b> |
| Ba-137m | 1.39E+01 | 8.58E+03    | 1.15E+04 | 1.75E+05 | 1.46E+03 | 7.66E+01 | 1.49E+03 | 6.25E+04 | 1.78E+03 | 1.76E+03 | <b>2.64E+05</b> |
| Bi-210  | 4.20E-11 | 9.01E-11    | 9.06E-06 | 6.01E-09 | 1.04E-09 | 4.02E-09 | 5.69E-10 | 5.01E-06 | 4.26E-10 | 4.53E-11 | <b>1.41E-05</b> |
| Bi-211  | 1.31E-08 | 7.90E-08    | 1.09E-01 | 1.26E-05 | 1.68E-08 | 6.32E-08 | 1.72E-06 | 4.21E+01 | 5.76E-08 | 9.47E-10 | <b>4.22E+01</b> |
| Bi-212  | 5.40E-16 | 3.45E-16    | 5.25E+00 | 5.54E-06 | 7.54E-15 | 3.24E-05 | 7.82E-15 | 1.19E+01 | 1.29E-17 | 3.75E-04 | <b>1.72E+01</b> |
| Bi-213  | 1.90E-07 | 1.45E-04    | 3.10E-02 | 2.97E-09 | 2.33E-06 | 1.29E-09 | 3.37E-13 | 5.66E+00 | 6.36E-11 | 1.36E-09 | <b>5.69E+00</b> |
| Bi-214  | 2.07E-10 | 7.65E-10    | 1.54E-05 | 3.45E-08 | 1.25E-08 | 1.39E-08 | 2.49E-09 | 3.63E-05 | 4.90E-09 | 5.78E-10 | <b>5.18E-05</b> |
| C-14    | --       | --          | 3.32E-06 | 1.14E-07 | --       | 2.16E-03 | --       | 2.16E+00 | --       | --       | <b>2.17E+00</b> |
| Cd-113m | 1.75E-01 | --          | --       | 2.68E-02 | --       | --       | --       | --       | --       | --       | <b>2.02E-01</b> |
| Ce-144  | 2.04E-11 | 3.25E+01    | --       | 5.62E+02 | --       | --       | --       | 1.52E-06 | --       | --       | <b>5.94E+02</b> |
| Cf-249  | --       | --          | --       | --       | --       | 4.61E-12 | --       | 8.03E-03 | --       | --       | <b>8.03E-03</b> |
| Cf-250  | --       | --          | --       | --       | --       | --       | --       | 2.05E-01 | --       | --       | <b>2.05E-01</b> |
| Cf-251  | --       | --          | --       | --       | --       | 5.85E-14 | --       | 1.37E-04 | --       | --       | <b>1.37E-04</b> |
| Cf-252  | --       | --          | --       | --       | --       | 7.59E-16 | --       | 7.22E-02 | --       | --       | <b>7.22E-02</b> |
| Cm-242  | 1.11E-24 | 1.36E-03    | 5.72E-03 | 1.21E-01 | 1.32E-11 | --       | --       | 2.67E-15 | --       | 1.50E-01 | <b>2.78E-01</b> |
| Cm-243  | --       | 4.67E-05    | 1.16E-02 | 1.27E+00 | --       | 1.59E-05 | --       | 9.25E+01 | 1.46E-01 | 3.42E-01 | <b>9.42E+01</b> |
| Cm-244  | 5.72E-02 | 1.59E-03    | 5.69E-01 | 4.83E+00 | 1.25E-02 | 1.51E-03 | --       | 4.14E+03 | 1.53E+00 | 7.61E+01 | <b>4.22E+03</b> |
| Cm-245  | --       | --          | 8.86E-07 | --       | --       | 5.68E-07 | --       | 1.41E-05 | --       | 1.71E-02 | <b>1.71E-02</b> |
| Cm-246  | --       | --          | --       | --       | --       | 7.39E-08 | --       | 5.88E-01 | --       | 1.28E-02 | <b>6.01E-01</b> |
| Cm-247  | --       | --          | --       | --       | --       | 1.74E-13 | --       | 1.29E-10 | --       | 2.56E-08 | <b>2.57E-08</b> |
| Cm-248  | --       | --          | --       | --       | --       | 3.45E-13 | --       | 1.71E-03 | --       | 5.87E-07 | <b>1.71E-03</b> |
| Co-60   | 4.74E-02 | 6.11E+00    | --       | 6.25E+01 | 5.81E-02 | --       | 2.92E-01 | 1.83E+02 | 8.39E-02 | 2.68E+02 | <b>5.20E+02</b> |
| Cs-134  | 8.22E-06 | 1.52E+02    | 9.29E-01 | 1.01E+00 | 5.73E-05 | --       | --       | 7.56E-01 | 1.81E+01 | 9.67E-05 | <b>1.72E+02</b> |

**Table 3-14. Unscaled RH Radionuclides (Ci) on a Site Basis Decayed Through 2006<sup>1</sup>**  
**Continued**

| Nuclide | ANL-E    | ANL-W<br>(MFC) | BAPL     | Hanford  | INL      | KAPL-S   | LANL     | ORNL     | SNL-A    | SRS      | Total           |
|---------|----------|----------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------------|
| Cs-135  | --       | --             | 9.01E-03 | 7.18E-04 | --       | 4.69E-04 | --       | --       | --       | --       | <b>1.02E-02</b> |
| Cs-137  | 1.48E+01 | 9.15E+03       | 1.22E+04 | 6.43E+05 | 1.55E+03 | 8.19E+01 | 1.59E+03 | 6.68E+04 | 1.91E+03 | 1.88E+03 | <b>7.39E+05</b> |
| Eu-152  | 5.05E-05 | --             | 4.23E-02 | 9.22E-03 | 3.31E-03 | --       | --       | 1.10E+04 | --       | 9.35E-03 | <b>1.10E+04</b> |
| Eu-154  | 2.13E-03 | 1.02E+02       | 1.27E+02 | 1.51E+00 | 1.09E-01 | --       | --       | 2.21E+03 | 3.98E+00 | 2.96E-01 | <b>2.45E+03</b> |
| Eu-155  | 2.10E-03 | 2.47E+02       | 2.66E-01 | 4.95E-01 | 1.64E-02 | --       | 1.28E+00 | 1.64E+02 | --       | --       | <b>4.13E+02</b> |
| Fe-55   | 1.87E-02 | --             | --       | 5.26E-02 | --       | --       | --       | --       | --       | --       | <b>7.13E-02</b> |
| Fr-221  | 1.91E-07 | 1.45E-04       | 3.10E-02 | 2.97E-09 | 2.33E-06 | 1.29E-09 | 3.37E-13 | 5.66E+00 | 6.36E-11 | 1.36E-09 | <b>5.70E+00</b> |
| Fr-223  | 1.81E-10 | 1.09E-09       | 1.51E-03 | 1.74E-07 | 2.33E-10 | 8.71E-10 | 2.38E-08 | 5.80E-01 | 7.96E-10 | 1.31E-11 | <b>5.82E-01</b> |
| Gd-152  | 6.64E-18 | --             | 7.54E-17 | 1.65E-17 | 9.52E-17 | --       | --       | 7.22E-10 | --       | 5.27E-17 | <b>7.22E-10</b> |
| H-3     | --       | 2.61E-04       | 2.20E+01 | 2.74E-01 | 2.29E-05 | --       | --       | --       | --       | --       | <b>2.23E+01</b> |
| Ho-166m | --       | --             | 2.04E-07 | --       | --       | --       | --       | --       | --       | --       | <b>2.04E-07</b> |
| I-129   | --       | --             | 5.77E-03 | 2.42E-03 | --       | 4.28E-05 | --       | 5.43E-07 | --       | --       | <b>8.23E-03</b> |
| Kr-81   | --       | --             | 1.80E-07 | --       | --       | --       | --       | --       | --       | --       | <b>1.80E-07</b> |
| Kr-85   | 1.13E-01 | --             | 2.17E+02 | --       | --       | --       | --       | --       | --       | --       | <b>2.17E+02</b> |
| Mn-54   | 3.49E-11 | 4.07E-03       | --       | --       | 1.37E-07 | --       | --       | --       | --       | --       | <b>4.07E-03</b> |
| Mo-93   | --       | --             | --       | 2.81E-03 | --       | --       | --       | --       | --       | --       | <b>2.81E-03</b> |
| Na-22   | --       | 2.96E-02       | --       | --       | --       | --       | --       | --       | --       | --       | <b>2.96E-02</b> |
| Nb-93m  | 3.49E-04 | --             | 6.11E-01 | 1.83E-04 | --       | 6.45E-04 | --       | --       | --       | --       | <b>6.13E-01</b> |
| Nb-94   | --       | --             | 1.89E-05 | --       | --       | --       | --       | --       | --       | --       | <b>1.89E-05</b> |
| Ni-59   | --       | --             | --       | 1.84E-02 | --       | 2.03E-04 | --       | 3.91E-01 | --       | --       | <b>4.09E-01</b> |
| Ni-63   | --       | --             | --       | 1.60E-02 | --       | 2.14E-02 | --       | 4.35E+01 | --       | --       | <b>4.35E+01</b> |
| Np-237  | 5.98E-04 | 6.61E-04       | 3.60E-02 | 7.77E-01 | 1.18E-02 | 9.93E-04 | 1.17E-05 | 8.07E-02 | 3.99E-03 | 1.62E-02 | <b>9.28E-01</b> |
| Np-238  | --       | 8.11E-06       | 3.40E-05 | 3.60E-06 | --       | --       | --       | --       | --       | 9.06E-04 | <b>9.51E-04</b> |
| Np-239  | 1.12E-05 | 1.70E-04       | 2.56E-02 | 1.77E-04 | --       | 6.07E-05 | --       | 5.35E-02 | --       | 1.39E+00 | <b>1.47E+00</b> |
| Np-240m | --       | --             | --       | --       | --       | 2.02E-12 | --       | 2.75E-10 | --       | 1.32E-13 | <b>2.77E-10</b> |
| Pa-231  | 3.64E-08 | 5.04E-07       | 1.74E-01 | 3.86E-04 | 5.95E-08 | 1.20E-07 | 5.30E-06 | 3.20E-03 | 4.47E-07 | 2.06E-08 | <b>1.78E-01</b> |
| Pa-233  | 5.92E-04 | 6.55E-04       | 3.56E-02 | 9.10E-02 | 1.17E-02 | 9.84E-04 | 1.15E-05 | 8.00E-02 | 3.95E-03 | 1.61E-02 | <b>2.41E-01</b> |
| Pa-234  | 2.80E-08 | 3.31E-07       | 7.92E-08 | 3.94E-05 | 5.84E-10 | 4.74E-10 | 5.26E-08 | 6.81E-02 | 1.01E-06 | 8.08E-06 | <b>6.81E-02</b> |
| Pa-234m | 2.16E-05 | 2.55E-04       | 6.09E-05 | 3.03E-02 | 4.49E-07 | 3.65E-07 | 4.04E-05 | 5.24E+01 | 7.75E-04 | 6.22E-03 | <b>5.24E+01</b> |
| Pb-209  | 1.91E-07 | 1.45E-04       | 3.10E-02 | 2.97E-09 | 2.33E-06 | 1.29E-09 | 3.37E-13 | 5.67E+00 | 6.37E-11 | 1.36E-09 | <b>5.70E+00</b> |
| Pb-210  | 4.25E-11 | 9.12E-11       | 9.17E-06 | 6.08E-09 | 1.05E-09 | 4.07E-09 | 5.75E-10 | 5.07E-06 | 4.31E-10 | 4.58E-11 | <b>1.42E-05</b> |
| Pb-211  | 1.31E-08 | 7.92E-08       | 1.10E-01 | 1.26E-05 | 1.69E-08 | 6.32E-08 | 1.73E-06 | 4.21E+01 | 5.76E-08 | 9.48E-10 | <b>4.22E+01</b> |
| Pb-212  | 5.38E-16 | 3.44E-16       | 5.23E+00 | 5.52E-06 | 7.52E-15 | 3.23E-05 | 7.80E-15 | 1.19E+01 | 1.29E-17 | 3.73E-04 | <b>1.71E+01</b> |
| Pb-214  | 2.07E-10 | 7.66E-10       | 1.55E-05 | 3.45E-08 | 1.26E-08 | 1.40E-08 | 2.49E-09 | 3.64E-05 | 4.91E-09 | 5.79E-10 | <b>5.19E-05</b> |

**Table 3-14. Unscaled RH Radionuclides (Ci) on a Site Basis Decayed Through 2006<sup>1</sup>**  
**Continued**

| Nuclide | ANL-E    | ANL-W<br>(MFC) | BAPL     | Hanford  | INL      | KAPL-S   | LANL     | ORNL     | SNL-A    | SRS      | Total           |
|---------|----------|----------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------------|
| Pd-107  | --       | --             | 2.76E-04 | 4.65E-05 | --       | 1.96E-05 | --       | --       | --       | --       | <b>3.42E-04</b> |
| Pm-146  | --       | --             | 4.27E-07 | --       | --       | --       | --       | --       | --       | --       | <b>4.27E-07</b> |
| Pm-147  | 3.77E-03 | 2.63E+02       | 1.30E+01 | 1.06E+01 | --       | 2.40E-02 | 1.35E-01 | 3.22E-02 | 1.04E+01 | --       | <b>2.97E+02</b> |
| Po-210  | 4.25E-11 | 9.07E-11       | 8.98E-06 | 6.08E-09 | 1.05E-09 | 4.07E-09 | 5.75E-10 | 5.07E-06 | 4.31E-10 | 4.12E-11 | <b>1.41E-05</b> |
| Po-211  | 4.00E-11 | 2.41E-10       | 3.34E-04 | 3.85E-08 | 5.14E-11 | 1.93E-10 | 5.26E-09 | 1.28E-01 | 1.76E-10 | 2.89E-12 | <b>1.29E-01</b> |
| Po-212  | 3.44E-16 | 2.20E-16       | 3.34E+00 | 3.53E-06 | 4.81E-15 | 2.06E-05 | 4.98E-15 | 7.60E+00 | 8.22E-18 | 2.39E-04 | <b>1.09E+01</b> |
| Po-213  | 1.87E-07 | 1.42E-04       | 3.03E-02 | 2.91E-09 | 2.28E-06 | 1.26E-09 | 3.30E-13 | 5.55E+00 | 6.23E-11 | 1.33E-09 | <b>5.58E+00</b> |
| Po-214  | 2.07E-10 | 7.66E-10       | 1.55E-05 | 3.45E-08 | 1.26E-08 | 1.40E-08 | 2.49E-09 | 3.63E-05 | 4.91E-09 | 5.79E-10 | <b>5.19E-05</b> |
| Po-215  | 1.31E-08 | 7.92E-08       | 1.10E-01 | 1.26E-05 | 1.69E-08 | 6.33E-08 | 1.73E-06 | 4.21E+01 | 5.77E-08 | 9.48E-10 | <b>4.23E+01</b> |
| Po-216  | 5.38E-16 | 3.43E-16       | 5.23E+00 | 5.52E-06 | 7.51E-15 | 3.23E-05 | 7.79E-15 | 1.19E+01 | 1.29E-17 | 3.73E-04 | <b>1.71E+01</b> |
| Po-218  | 2.04E-10 | 7.53E-10       | 1.52E-05 | 3.39E-08 | 1.23E-08 | 1.37E-08 | 2.45E-09 | 3.57E-05 | 4.83E-09 | 5.69E-10 | <b>5.10E-05</b> |
| Pr-144  | 2.00E-11 | 3.18E+01       | --       | 5.50E+02 | --       | --       | --       | 1.48E-06 | --       | --       | <b>5.82E+02</b> |
| Pu-236  | --       | --             | 1.06E-07 | --       | --       | --       | --       | --       | --       | --       | <b>1.06E-07</b> |
| Pu-238  | 3.18E+00 | 3.90E-01       | 2.88E+02 | 1.44E+03 | 4.66E+03 | 3.20E+00 | 1.28E+00 | 1.26E+03 | 1.75E+01 | 6.61E+01 | <b>7.73E+03</b> |
| Pu-239  | 6.27E+00 | 6.81E+00       | 5.02E-01 | 1.09E+03 | 6.24E+02 | 8.82E-03 | 2.45E+02 | 8.74E+02 | 1.21E+01 | 1.18E+01 | <b>2.87E+03</b> |
| Pu-240  | 1.37E+00 | 8.18E+00       | 5.63E-01 | 3.62E+02 | 2.21E+02 | 2.21E-03 | 2.53E+00 | 9.56E+01 | 1.82E+00 | 1.43E+01 | <b>7.07E+02</b> |
| Pu-241  | 8.79E+00 | 2.93E+02       | 3.73E+01 | 2.14E+05 | 2.29E+03 | 2.58E-01 | 2.51E+01 | 1.16E+03 | 8.76E-02 | 8.93E+02 | <b>2.19E+05</b> |
| Pu-242  | --       | 1.76E-04       | 3.99E-03 | 2.23E-01 | 3.20E-02 | 8.42E-06 | 1.52E-03 | 3.92E-01 | --       | 3.83E-02 | <b>6.91E-01</b> |
| Pu-243  | --       | --             | --       | --       | --       | 1.72E-13 | --       | 1.28E-10 | --       | 2.53E-08 | <b>2.54E-08</b> |
| Pu-244  | --       | --             | --       | --       | --       | 2.00E-12 | --       | 2.72E-10 | --       | 1.31E-13 | <b>2.74E-10</b> |
| Ra-223  | 1.33E-08 | 8.00E-08       | 1.11E-01 | 1.28E-05 | 1.70E-08 | 6.39E-08 | 1.74E-06 | 4.26E+01 | 5.83E-08 | 9.59E-10 | <b>4.27E+01</b> |
| Ra-224  | 5.37E-16 | 3.43E-16       | 5.22E+00 | 5.51E-06 | 7.50E-15 | 3.22E-05 | 7.78E-15 | 1.19E+01 | 1.28E-17 | 3.73E-04 | <b>1.71E+01</b> |
| Ra-225  | 1.91E-07 | 1.46E-04       | 3.10E-02 | 2.98E-09 | 2.33E-06 | 1.29E-09 | 3.37E-13 | 5.67E+00 | 6.37E-11 | 1.36E-09 | <b>5.70E+00</b> |
| Ra-226  | 2.09E-10 | 7.75E-10       | 1.56E-05 | 3.49E-08 | 1.27E-08 | 1.41E-08 | 2.52E-09 | 3.68E-05 | 4.97E-09 | 5.86E-10 | <b>5.25E-05</b> |
| Ra-228  | 6.34E-16 | 1.31E-15       | 3.02E-03 | 2.72E-05 | 1.32E-14 | 5.05E-11 | 9.19E-15 | 3.59E+00 | 3.14E-17 | 1.04E-13 | <b>3.59E+00</b> |
| Rb-87   | --       | --             | 9.68E-07 | --       | --       | --       | --       | --       | --       | --       | <b>9.68E-07</b> |
| Rh-106  | 8.15E-09 | --             | 1.51E-05 | 6.81E+02 | --       | --       | 1.87E-07 | 2.05E-04 | --       | --       | <b>6.81E+02</b> |
| Rn-219  | 1.31E-08 | 7.91E-08       | 1.09E-01 | 1.26E-05 | 1.68E-08 | 6.32E-08 | 1.72E-06 | 4.21E+01 | 5.76E-08 | 9.47E-10 | <b>4.22E+01</b> |
| Rn-220  | 5.38E-16 | 3.44E-16       | 5.23E+00 | 5.52E-06 | 7.51E-15 | 3.23E-05 | 7.79E-15 | 1.19E+01 | 1.29E-17 | 3.73E-04 | <b>1.71E+01</b> |
| Rn-222  | 2.07E-10 | 7.67E-10       | 1.55E-05 | 3.46E-08 | 1.26E-08 | 1.40E-08 | 2.49E-09 | 3.64E-05 | 4.91E-09 | 5.80E-10 | <b>5.19E-05</b> |
| Ru-106  | 8.23E-09 | --             | 1.52E-05 | 6.88E+02 | --       | --       | 1.89E-07 | 2.08E-04 | --       | --       | <b>6.88E+02</b> |
| Sb-125  | 4.84E-04 | 4.92E-01       | 5.38E-01 | 1.37E+00 | --       | --       | 1.40E-01 | 7.02E-04 | --       | 1.31E-03 | <b>2.54E+00</b> |
| Sb-126  | 4.35E-05 | --             | 4.61E-03 | 8.97E-05 | --       | 5.48E-05 | --       | --       | --       | --       | <b>4.80E-03</b> |
| Sb-126m | 3.11E-04 | --             | 3.29E-02 | 6.40E-04 | --       | 3.91E-04 | --       | --       | --       | --       | <b>3.43E-02</b> |

**Table 3-14. Unscaled RH Radionuclides (Ci) on a Site Basis Decayed Through 2006<sup>1</sup>**  
**Continued**

| Nuclide      | ANL-E           | ANL-W<br>(MFC)  | BAPL            | Hanford         | INL             | KAPL-S          | LANL            | ORNL            | SNL-A           | SRS             | Total           |
|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Se-79        | --              | --              | 9.19E-02        | 4.26E-04        | --              | 1.20E-04        | --              | --              | --              | --              | <b>9.24E-02</b> |
| Sm-146       | --              | --              | 1.14E-15        | --              | --              | --              | --              | --              | --              | --              | <b>1.14E-15</b> |
| Sm-147       | 3.33E-10        | 7.80E-09        | 9.67E-11        | 7.84E-11        | --              | 1.61E-12        | 4.15E-09        | 2.02E-10        | 2.48E-09        | --              | <b>1.51E-08</b> |
| Sm-151       | 6.93E-01        | 1.15E+01        | 5.12E+01        | 3.59E+02        | --              | 1.31E+00        | --              | --              | --              | --              | <b>4.24E+02</b> |
| Sn-121m      | --              | --              | 4.42E-02        | 9.26E-05        | --              | 3.31E-03        | --              | --              | --              | --              | <b>4.76E-02</b> |
| Sn-126       | 3.11E-04        | --              | 3.30E-02        | 6.41E-04        | --              | 3.92E-04        | --              | --              | --              | --              | <b>3.43E-02</b> |
| Sr-90        | 8.35E+00        | 1.10E+04        | 1.21E+04        | 4.35E+05        | 1.15E+03        | 7.78E+01        | 1.43E+03        | 1.78E+05        | 1.90E+03        | 1.20E+03        | <b>6.42E+05</b> |
| Tc-99        | 3.81E-03        | --              | 3.02E+00        | 1.57E+01        | --              | 2.46E-02        | --              | 1.35E+02        | --              | 3.73E-01        | <b>1.54E+02</b> |
| Te-125m      | 1.17E-04        | 1.19E-01        | 1.28E-01        | 3.26E-01        | --              | --              | 3.41E-02        | 1.70E-04        | --              | 3.17E-04        | <b>6.08E-01</b> |
| Th-227       | 1.29E-08        | 7.79E-08        | 1.08E-01        | 1.24E-05        | 1.66E-08        | 6.23E-08        | 1.70E-06        | 4.15E+01        | 5.68E-08        | 9.34E-10        | <b>4.16E+01</b> |
| Th-228       | 5.44E-16        | 3.47E-16        | 5.29E+00        | 5.58E-06        | 7.60E-15        | 3.27E-05        | 7.88E-15        | 1.20E+01        | 1.30E-17        | 3.78E-04        | <b>1.73E+01</b> |
| Th-229       | 1.91E-07        | 1.46E-04        | 3.11E-02        | 2.98E-09        | 2.34E-06        | 1.29E-09        | 3.38E-13        | 5.68E+00        | 6.38E-11        | 1.37E-09        | <b>5.71E+00</b> |
| Th-230       | 4.60E-08        | 3.18E-07        | 1.28E-03        | 9.47E-06        | 7.76E-06        | 1.82E-06        | 4.36E-07        | 1.31E-02        | 2.55E-06        | 6.56E-07        | <b>1.44E-02</b> |
| Th-231       | 5.50E-05        | 2.81E-03        | 8.76E-03        | 5.73E-03        | 1.31E-04        | 8.30E-05        | 9.19E-03        | 1.32E+00        | 2.32E-03        | 3.20E-04        | <b>1.34E+00</b> |
| Th-232       | 9.67E-16        | 7.72E-15        | 3.02E-03        | 2.38E-04        | 2.85E-14        | 4.83E-11        | 1.22E-14        | 3.52E+00        | 1.08E-16        | 6.37E-13        | <b>3.53E+00</b> |
| Th-234       | 2.16E-05        | 2.55E-04        | 6.10E-05        | 3.04E-02        | 4.50E-07        | 3.65E-07        | 4.05E-05        | 5.24E+01        | 7.76E-04        | 6.22E-03        | <b>5.25E+01</b> |
| Tl-207       | 1.30E-08        | 7.87E-08        | 1.09E-01        | 1.26E-05        | 1.68E-08        | 6.29E-08        | 1.72E-06        | 4.19E+01        | 5.73E-08        | 9.43E-10        | <b>4.20E+01</b> |
| Tl-208       | 1.94E-16        | 1.24E-16        | 1.88E+00        | 1.99E-06        | 2.71E-15        | 1.16E-05        | 2.81E-15        | 4.28E+00        | 4.63E-18        | 1.34E-04        | <b>6.16E+00</b> |
| Tl-209       | 4.19E-09        | 3.20E-06        | 6.82E-04        | 6.54E-11        | 5.13E-08        | 2.83E-11        | 7.41E-15        | 1.25E-01        | 1.40E-12        | 3.00E-11        | <b>1.25E-01</b> |
| U-232        | --              | --              | 1.71E+01        | 5.77E-06        | --              | 3.83E-05        | --              | 1.03E+01        | --              | 5.62E-04        | <b>2.74E+01</b> |
| U-233        | 6.59E-05        | 1.20E-01        | 1.10E+01        | 5.11E+00        | 2.56E-01        | 4.70E-07        | 5.03E-10        | 4.24E+02        | 1.51E-07        | 2.01E-06        | <b>4.40E+02</b> |
| U-234        | 3.17E-04        | 4.32E-03        | 1.54E+00        | 3.46E+00        | 6.12E-01        | 5.65E-03        | 1.85E-03        | 2.70E+01        | 3.18E-02        | 2.31E-02        | <b>3.26E+01</b> |
| U-235        | 5.57E-05        | 4.12E-03        | 8.86E-03        | 1.49E-01        | 1.64E-02        | 8.40E-05        | 9.30E-03        | 1.33E+00        | 2.35E-03        | 3.24E-04        | <b>1.52E+00</b> |
| U-236        | 1.26E-06        | 5.15E-05        | 1.01E-01        | 5.77E-02        | 6.94E-05        | 7.97E-04        | 1.01E-05        | 5.25E-02        | 4.86E-07        | 4.29E-03        | <b>2.16E-01</b> |
| U-237        | 2.16E-04        | 7.19E-03        | 9.17E-04        | 5.24E+00        | 2.87E-02        | 6.35E-06        | 6.16E-04        | 2.84E-02        | 2.15E-06        | 2.19E-02        | <b>5.33E+00</b> |
| U-238        | 2.18E-05        | 2.57E-04        | 6.16E-05        | 3.22E+00        | 2.73E-03        | 3.69E-07        | 4.09E-05        | 5.29E+01        | 7.84E-04        | 6.29E-03        | <b>5.62E+01</b> |
| U-240        | --              | --              | --              | --              | --              | 1.98E-12        | --              | 2.69E-10        | --              | 1.29E-13        | <b>2.71E-10</b> |
| Y-90         | 8.26E+00        | 1.09E+04        | 1.20E+04        | 1.12E+05        | 1.15E+03        | 7.69E+01        | 1.41E+03        | 1.76E+05        | 1.87E+03        | 1.19E+03        | <b>3.17E+05</b> |
| Y-91         | --              | 6.58E-07        | --              | --              | --              | --              | --              | --              | --              | --              | <b>6.58E-07</b> |
| Zn-65        | --              | --              | --              | --              | 1.09E-07        | --              | --              | --              | --              | --              | <b>1.09E-07</b> |
| Zr-93        | 4.61E-04        | --              | 7.65E-01        | 3.86E-03        | --              | 3.01E-03        | --              | --              | --              | --              | <b>7.73E-01</b> |
| <b>Total</b> | <b>6.97E+01</b> | <b>4.08E+04</b> | <b>4.86E+04</b> | <b>1.60E+06</b> | <b>1.52E+04</b> | <b>3.18E+02</b> | <b>6.21E+03</b> | <b>5.08E+05</b> | <b>7.62E+03</b> | <b>7.44E+03</b> | <b>2.24E+06</b> |

<sup>1</sup>Data Source: CID Data Version D.6.06, LANL-CO 2008.

**Table 3-15. Disposal Radionuclide Inventory Decayed Through 2006<sup>1</sup>**

| <b>Radionuclide</b> | <b>CH-TRU Waste<br/>(Ci/m<sup>3</sup>)</b> | <b>RH-TRU Waste<br/>(Ci/m<sup>3</sup>)</b> | <b>CH-TRU Waste<br/>(Total Ci)</b> | <b>RH-TRU Waste<br/>(Total Ci)</b> |
|---------------------|--|--|------------------------------------|------------------------------------|
| Ac-225              | 7.69E-06                                   | 3.84E-03                                   | 1.30E+00                           | 2.72E+01                           |
| Ac-227              | 2.07E-06                                   | 1.23E-02                                   | 3.49E-01                           | 8.73E+01                           |
| Ac-228              | 1.63E-06                                   | 8.92E-04                                   | 2.74E-01                           | 6.32E+00                           |
| Ag-109m             | 9.03E-08                                   | --   | 1.52E-02                           | --                                 |
| Ag-110              | 1.01E-10                                   | 8.84E-17                                   | 1.71E-05                           | 6.26E-13                           |
| Ag-110m             | 1.16E-06                                   | 6.72E-15                                   | 1.96E-01                           | 4.75E-11                           |
| Am-241              | 2.76E+00                                   | 3.94E+00                                   | 4.64E+05                           | 2.79E+04                           |
| Am-242              | 5.80E-06                                   | 3.90E-05                                   | 9.78E-01                           | 2.76E-01                           |
| Am-242m             | 4.72E-05                                   | 3.96E-05                                   | 7.95E+00                           | 2.81E-01                           |
| Am-243              | 5.50E-04                                   | 8.94E-04                                   | 9.27E+01                           | 6.33E+00                           |
| Am-245              | 3.24E-16                                   | --   | 5.46E-11                           | --                                 |
| At-217              | 7.69E-06                                   | 3.85E-03                                   | 1.30E+00                           | 2.72E+01                           |
| Ba-133              | 6.33E-08                                   | 6.55E-11                                   | 1.07E-02                           | 4.64E-07                           |
| Ba-137m             | 4.50E-02                                   | 5.26E+01                                   | 7.58E+03                           | 3.72E+05                           |
| Bi-210              | 8.95E-06                                   | 3.11E-09                                   | 1.51E+00                           | 2.20E-05                           |
| Bi-211              | 2.01E-06                                   | 1.22E-02                                   | 3.39E-01                           | 8.64E+01                           |
| Bi-212              | 1.39E-04                                   | 8.23E-03                                   | 2.34E+01                           | 5.83E+01                           |
| Bi-213              | 7.68E-06                                   | 3.84E-03                                   | 1.29E+00                           | 2.72E+01                           |
| Bi-214              | 1.68E-05                                   | 1.90E-08                                   | 2.84E+00                           | 1.34E-04                           |
| Bk-249              | 4.98E-06                                   | --   | 8.39E-01                           | --                                 |
| Bk-250              | 1.72E-16                                   | --   | 2.90E-11                           | --                                 |
| C-14                | 9.86E-06                                   | 6.31E-04                                   | 1.66E+00                           | 4.47E+00                           |
| Cd-109              | 1.56E-05                                   | --   | 2.63E+00                           | --                                 |
| Cd-113m             | --   | 1.32E-04                                   | --                                 | 9.33E-01                           |
| Ce-139              | 9.06E-27                                   | --   | 1.53E-21                           | --                                 |
| Ce-141              | 3.26E-05                                   | --   | 5.49E+00                           | --                                 |
| Ce-144              | 2.72E-04                                   | 1.07E-01                                   | 4.59E+01                           | 7.60E+02                           |
| Cf-249              | 2.81E-03                                   | 2.45E-06                                   | 4.73E+02                           | 1.74E-02                           |
| Cf-250              | 2.62E-06                                   | 5.96E-05                                   | 4.41E-01                           | 4.22E-01                           |
| Cf-251              | 1.79E-07                                   | 4.19E-08                                   | 3.01E-02                           | 2.97E-04                           |
| Cf-252              | 3.42E-04                                   | 2.18E-05                                   | 5.77E+01                           | 1.55E-01                           |
| Cl-36               | 1.19E-08                                   | --   | 2.00E-03                           | --                                 |
| Cm-242              | 1.64E-05                                   | 4.95E-05                                   | 2.76E+00                           | 3.51E-01                           |

**Table 3-15. Disposal Radionuclide Inventory Decayed Through 2006<sup>1</sup>**  
**Continued**

| <b>Radionuclide</b> | <b>CH-TRU Waste<br/>(Ci/m<sup>3</sup>)</b> | <b>RH-TRU Waste<br/>(Ci/m<sup>3</sup>)</b> | <b>CH-TRU Waste<br/>(Total Ci)</b> | <b>RH-TRU Waste<br/>(Total Ci)</b> |
|---------------------|--|--|------------------------------------|------------------------------------|
| Cm-243              | 1.31E-05                                   | 2.71E-02                                   | 2.21E+00                           | 1.92E+02                           |
| Cm-244              | 4.53E-02                                   | 1.23E+00                                   | 7.63E+03                           | 8.70E+03                           |
| Cm-245              | 2.54E-06                                   | 7.69E-06                                   | 4.28E-01                           | 5.44E-02                           |
| Cm-246              | 4.44E-05                                   | 1.89E-04                                   | 7.48E+00                           | 1.34E+00                           |
| Cm-247              | 5.48E-07                                   | 1.99E-11                                   | 9.24E-02                           | 1.41E-07                           |
| Cm-248              | 1.05E-06                                   | 5.23E-07                                   | 1.78E-01                           | 3.70E-03                           |
| Cm-250              | 1.58E-15                                   | --   | 2.66E-10                           | --                                 |
| Co-60               | 5.75E-06                                   | 1.53E-01                                   | 9.69E-01                           | 1.09E+03                           |
| Cs-134              | 1.00E-02                                   | 1.32E-01                                   | 1.69E+03                           | 9.33E+02                           |
| Cs-135              | --   | 1.71E-06                                   | --                                 | 1.21E-02                           |
| Cs-137              | 4.84E-02                                   | 4.79E+02                                   | 8.15E+03                           | 3.39E+06                           |
| Es-254              | 8.59E-17                                   | --   | 1.45E-11                           | --                                 |
| Eu-150              | 2.87E-08                                   | --   | 4.84E-03                           | --                                 |
| Eu-152              | 2.28E-05                                   | 3.20E+00                                   | 3.84E+00                           | 2.27E+04                           |
| Eu-154              | 1.91E+00                                   | 7.49E-01                                   | 3.21E+05                           | 5.30E+03                           |
| Eu-155              | 1.29E+01                                   | 2.62E-01                                   | 2.17E+06                           | 1.85E+03                           |
| Fe-55               | 7.41E-10                                   | 2.11E-05                                   | 1.25E-04                           | 1.49E-01                           |
| Fr-221              | 7.68E-06                                   | 3.84E-03                                   | 1.29E+00                           | 2.72E+01                           |
| Fr-223              | 2.78E-08                                   | 1.68E-04                                   | 4.68E-03                           | 1.19E+00                           |
| Gd-152              | 5.98E-19                                   | 2.09E-13                                   | 1.01E-13                           | 1.48E-09                           |
| H-3                 | 1.50E-02                                   | 3.14E-03                                   | 2.53E+03                           | 2.23E+01                           |
| Ho-166m             | 1.21E-09                                   | 2.88E-11                                   | 2.04E-04                           | 2.04E-07                           |
| I-129               | 4.91E-11                                   | 3.08E-06                                   | 8.27E-06                           | 2.18E-02                           |
| K-40                | 2.60E-08                                   | --   | 4.38E-03                           | --                                 |
| Kr-81               | --   | 2.55E-11                                   | --                                 | 1.80E-07                           |
| Kr-85               | 2.93E-03                                   | 3.07E-02                                   | 4.94E+02                           | 2.18E+02                           |
| Mn-54               | 1.56E-08                                   | 3.51E-06                                   | 2.63E-03                           | 2.48E-02                           |
| Mo-93               | --   | 3.97E-07                                   | --                                 | 2.81E-03                           |
| Na-22               | 1.21E-06                                   | 2.55E-05                                   | 2.03E-01                           | 1.81E-01                           |
| Nb-93m              | 1.19E-09                                   | 8.71E-05                                   | 2.01E-04                           | 6.17E-01                           |
| Nb-94               | 2.33E-11                                   | 2.67E-09                                   | 3.92E-06                           | 1.89E-05                           |
| Nb-95               | 6.94E-13                                   | --   | 1.17E-07                           | --                                 |
| Ni-59               | 4.61E-07                                   | 1.16E-04                                   | 7.77E-02                           | 8.20E-01                           |



**Table 3-15. Disposal Radionuclide Inventory Decayed Through 2006<sup>1</sup>**  
**Continued**

| <b>Radionuclide</b> | <b>CH-TRU Waste<br/>(Ci/m<sup>3</sup>)</b> | <b>RH-TRU Waste<br/>(Ci/m<sup>3</sup>)</b> | <b>CH-TRU Waste<br/>(Total Ci)</b> | <b>RH-TRU Waste<br/>(Total Ci)</b> |
|---------------------|--|--|------------------------------------|------------------------------------|
| Ni-63               | 2.25E-05                                   | 1.26E-02                                   | 3.79E+00                           | 8.92E+01                           |
| Np-237              | 2.02E-04                                   | 6.89E-04                                   | 3.41E+01                           | 4.88E+00                           |
| Np-238              | 2.78E-08                                   | 1.96E-07                                   | 4.68E-03                           | 1.39E-03                           |
| Np-239              | 5.43E-04                                   | 7.69E-04                                   | 9.15E+01                           | 5.44E+00                           |
| Np-240m             | 1.91E-09                                   | 8.54E-14                                   | 3.21E-04                           | 6.04E-10                           |
| Pa-231              | 2.72E-06                                   | 2.57E-05                                   | 4.59E-01                           | 1.82E-01                           |
| Pa-233              | 2.00E-04                                   | 5.41E-05                                   | 3.37E+01                           | 3.83E-01                           |
| Pa-234              | 4.39E-07                                   | 1.98E-05                                   | 7.39E-02                           | 1.40E-01                           |
| Pa-234m             | 3.37E-04                                   | 1.52E-02                                   | 5.68E+01                           | 1.08E+02                           |
| Pb-209              | 7.69E-06                                   | 3.84E-03                                   | 1.30E+00                           | 2.72E+01                           |
| Pb-210              | 9.06E-06                                   | 3.14E-09                                   | 1.53E+00                           | 2.23E-05                           |
| Pb-211              | 2.02E-06                                   | 1.22E-02                                   | 3.40E-01                           | 8.65E+01                           |
| Pb-212              | 1.38E-04                                   | 8.20E-03                                   | 2.33E+01                           | 5.81E+01                           |
| Pb-214              | 1.69E-05                                   | 1.90E-08                                   | 2.84E+00                           | 1.35E-04                           |
| Pd-107              | --   | 5.95E-08                                   | --                                 | 4.21E-04                           |
| Pm-146              | --   | 6.03E-11                                   | --                                 | 4.27E-07                           |
| Pm-147              | 7.14E-03                                   | 2.36E-01                                   | 1.20E+03                           | 1.67E+03                           |
| Po-210              | 9.05E-06                                   | 3.12E-09                                   | 1.52E+00                           | 2.21E-05                           |
| Po-211              | 6.15E-09                                   | 3.72E-05                                   | 1.04E-03                           | 2.64E-01                           |
| Po-212              | 8.84E-05                                   | 5.24E-03                                   | 1.49E+01                           | 3.71E+01                           |
| Po-213              | 7.52E-06                                   | 3.76E-03                                   | 1.27E+00                           | 2.66E+01                           |
| Po-214              | 1.69E-05                                   | 1.90E-08                                   | 2.84E+00                           | 1.35E-04                           |
| Po-215              | 2.02E-06                                   | 1.22E-02                                   | 3.40E-01                           | 8.65E+01                           |
| Po-216              | 1.38E-04                                   | 8.20E-03                                   | 2.33E+01                           | 5.80E+01                           |
| Po-218              | 1.66E-05                                   | 1.87E-08                                   | 2.79E+00                           | 1.32E-04                           |
| Pr-144              | 2.56E-04                                   | 1.05E-01                                   | 4.32E+01                           | 7.45E+02                           |
| Pu-236              | 2.32E-08                                   | 1.50E-11                                   | 3.90E-03                           | 1.06E-07                           |
| Pu-238              | 1.26E+01                                   | 1.32E+00                                   | 2.12E+06                           | 9.36E+03                           |
| Pu-239              | 3.19E+00                                   | 1.10E+00                                   | 5.38E+05                           | 7.80E+03                           |
| Pu-240              | 7.79E-01                                   | 2.16E-01                                   | 1.31E+05                           | 1.53E+03                           |
| Pu-241              | 1.13E+01                                   | 3.23E+01                                   | 1.90E+06                           | 2.29E+05                           |
| Pu-242              | 3.38E-04                                   | 1.63E-04                                   | 5.69E+01                           | 1.16E+00                           |
| Pu-243              | 5.42E-07                                   | 1.97E-11                                   | 9.13E-02                           | 1.39E-07                           |

**Table 3-15. Disposal Radionuclide Inventory Decayed Through 2006<sup>1</sup>**  
**Continued**

| <b>Radionuclide</b> | <b>CH-TRU Waste<br/>(Ci/m<sup>3</sup>)</b> | <b>RH-TRU Waste<br/>(Ci/m<sup>3</sup>)</b> | <b>CH-TRU Waste<br/>(Total Ci)</b> | <b>RH-TRU Waste<br/>(Total Ci)</b> |
|---------------------|--|--|------------------------------------|------------------------------------|
| Pu-244              | 1.89E-09                                   | 8.46E-14                                   | 3.19E-04                           | 5.99E-10                           |
| Ra-223              | 2.04E-06                                   | 1.24E-02                                   | 3.43E-01                           | 8.74E+01                           |
| Ra-224              | 1.38E-04                                   | 8.19E-03                                   | 2.33E+01                           | 5.80E+01                           |
| Ra-225              | 7.69E-06                                   | 3.85E-03                                   | 1.30E+00                           | 2.72E+01                           |
| Ra-226              | 1.71E-05                                   | 1.92E-08                                   | 2.87E+00                           | 1.36E-04                           |
| Ra-228              | 1.92E-06                                   | 1.05E-03                                   | 3.24E-01                           | 7.46E+00                           |
| Rb-87               | --   | 1.37E-10                                   | --                                 | 9.68E-07                           |
| Rh-106              | 1.14E-03                                   | 9.62E-02                                   | 1.92E+02                           | 6.81E+02                           |
| Rn-219              | 2.01E-06                                   | 1.22E-02                                   | 3.39E-01                           | 8.64E+01                           |
| Rn-220              | 1.38E-04                                   | 8.20E-03                                   | 2.33E+01                           | 5.80E+01                           |
| Rn-222              | 1.69E-05                                   | 1.90E-08                                   | 2.84E+00                           | 1.35E-04                           |
| Ru-103              | 1.53E-05                                   | --   | 2.59E+00                           | --                                 |
| Ru-106              | 1.22E-03                                   | 9.72E-02                                   | 2.06E+02                           | 6.88E+02                           |
| Sb-125              | 4.12E-06                                   | 7.14E-04                                   | 6.95E-01                           | 5.05E+00                           |
| Sb-126              | 8.08E-11                                   | 7.35E-07                                   | 1.36E-05                           | 5.20E-03                           |
| Sb-126m             | 5.77E-10                                   | 5.25E-06                                   | 9.72E-05                           | 3.71E-02                           |
| Sc-46               | 1.39E-30                                   | --   | 2.34E-25                           | --                                 |
| Se-75               | 6.30E-15                                   | --   | 1.06E-09                           | --                                 |
| Se-79               | 7.97E-10                                   | 1.31E-05                                   | 1.34E-04                           | 9.29E-02                           |
| Sm-146              | --   | 1.61E-19                                   | --                                 | 1.14E-15                           |
| Sm-147              | 5.72E-14                                   | 8.13E-12                                   | 9.64E-09                           | 5.76E-08                           |
| Sm-151              | 4.26E-05                                   | 6.96E-02                                   | 7.18E+00                           | 4.93E+02                           |
| Sn-121m             | --   | 8.61E-06                                   | --                                 | 6.10E-02                           |
| Sn-126              | 5.78E-10                                   | 5.25E-06                                   | 9.73E-05                           | 3.72E-02                           |
| Sr-90               | 1.39E-02                                   | 3.78E+02                                   | 2.34E+03                           | 2.67E+06                           |
| Tc-99               | 2.33E-04                                   | 5.42E-02                                   | 3.93E+01                           | 3.83E+02                           |
| Te-123              | 5.25E-23                                   | --   | 8.84E-18                           | --                                 |
| Te-123m             | 4.88E-27                                   | --   | 8.22E-22                           | --                                 |
| Te-125m             | 7.16E-05                                   | 1.72E-04                                   | 1.21E+01                           | 1.22E+00                           |
| Th-227              | 1.99E-06                                   | 1.20E-02                                   | 3.35E-01                           | 8.52E+01                           |
| Th-228              | 1.40E-04                                   | 8.29E-03                                   | 2.36E+01                           | 5.87E+01                           |
| Th-229              | 7.71E-06                                   | 3.85E-03                                   | 1.30E+00                           | 2.73E+01                           |
| Th-230              | 8.61E-07                                   | 7.64E-06                                   | 1.45E-01                           | 5.41E-02                           |

**Table 3-15. Disposal Radionuclide Inventory Decayed Through 2006<sup>1</sup>**  
**Continued**

| <b>Radionuclide</b> | <b>CH-TRU Waste<br/>(Ci/m<sup>3</sup>)</b> | <b>RH-TRU Waste<br/>(Ci/m<sup>3</sup>)</b> | <b>CH-TRU Waste<br/>(Total Ci)</b> | <b>RH-TRU Waste<br/>(Total Ci)</b> |
|---------------------|--|--|------------------------------------|------------------------------------|
| Th-231              | 3.98E-05                                   | 3.90E-04                                   | 6.70E+00                           | 2.76E+00                           |
| Th-232              | 8.62E-06                                   | 1.06E-03                                   | 1.45E+00                           | 7.48E+00                           |
| Th-234              | 3.38E-04                                   | 1.52E-02                                   | 5.69E+01                           | 1.08E+02                           |
| Tl-204              | 4.46E-11                                   | --   | 7.51E-06                           | --                                 |
| Tl-207              | 2.01E-06                                   | 1.21E-02                                   | 3.38E-01                           | 8.60E+01                           |
| Tl-208              | 4.98E-05                                   | 2.95E-03                                   | 8.39E+00                           | 2.09E+01                           |
| Tl-209              | 1.69E-07                                   | 8.45E-05                                   | 2.85E-02                           | 5.98E-01                           |
| U-232               | 1.35E-04                                   | 1.01E-02                                   | 2.28E+01                           | 7.12E+01                           |
| U-233               | 4.62E-03                                   | 1.32E-01                                   | 7.79E+02                           | 9.34E+02                           |
| U-234               | 1.37E-03                                   | 1.14E-02                                   | 2.31E+02                           | 8.08E+01                           |
| U-235               | 5.13E-05                                   | 5.30E-04                                   | 8.65E+00                           | 3.75E+00                           |
| U-236               | 1.10E-05                                   | 8.35E-05                                   | 1.86E+00                           | 5.91E-01                           |
| U-237               | 2.59E-04                                   | 7.62E-04                                   | 4.36E+01                           | 5.40E+00                           |
| U-238               | 3.45E-04                                   | 1.83E-02                                   | 5.80E+01                           | 1.30E+02                           |
| U-240               | 1.87E-09                                   | 8.37E-14                                   | 3.15E-04                           | 5.92E-10                           |
| Y-90                | 1.32E-02                                   | 7.84E+01                                   | 2.22E+03                           | 5.55E+05                           |
| Y-91                | --   | 5.79E-10                                   | --                                 | 4.10E-06                           |
| Zn-65               | 2.96E-09                                   | 1.54E-11                                   | 4.99E-04                           | 1.09E-07                           |
| Zr-93               | 6.79E-09                                   | 1.11E-04                                   | 1.14E-03                           | 7.87E-01                           |
| Zr-95               | 8.30E-06                                   | --   | 1.40E+00                           | --                                 |
| <b>Grand Total</b>  | <b>4.56E+01</b>                            | <b>1.03E+03</b>                            | <b>7.68E+06</b>                    | <b>7.32E+06</b>                    |

Data Source: CID Data Version D.6.06, LANL 2008.

<sup>1</sup> Concentration and total curies estimates based on 168,485 m<sup>3</sup> of CH waste and 7,079 m<sup>3</sup> of RH waste.

## 4.0 NON-WIPP/POTENTIAL WIPP TRANSURANIC WASTE

This section identifies TRU waste streams currently not included in the WIPP-bound TRU waste inventory. The TRU waste permitted to come to WIPP is restricted by radionuclide activity limits, volume, classification, and purpose of generation (i.e., TRU waste generated only from defense activities). These restrictions are discussed in section 4.1. Other restrictions result from how the waste has been managed at the DOE TRU waste sites. Some materials that have not been declared TRU waste by the sites at this time may become TRU waste in the future. These potential future waste streams may ultimately become eligible for shipment to WIPP and are discussed in section 4.2. Waste profiles and waste streams for potential TRU waste are presented in Appendix C.

### 4.1 Non-WIPP Transuranic Waste

As listed below, the DOE has several categories of TRU waste that are currently not acceptable for disposal in WIPP:

- Non-defense TRU waste — The DOE National Security and Military Applications of Nuclear Energy Authorization Act of 1980 authorized the construction of WIPP to demonstrate the safe disposal of radioactive waste resulting from U. S. defense activities.<sup>4</sup> Under the LWA, Congress restricted WIPP to the disposal of TRU radioactive waste from atomic energy defense activities.<sup>5</sup> Accordingly, WIPP may not accept non-TRU radioactive waste, and more specifically, non-defense (i.e., commercial) TRU radioactive waste for disposal.
- RH-TRU waste exceeding 23,000 Ci/m<sup>3</sup> (23 Ci/l) — This limit is mandated by the LWA.
- RH-TRU waste with dose rates greater than 1000 rem/hr — This limit is mandated by the LWA, which also requires that only 5 percent of the RH-TRU waste emplaced at WIPP may exceed 100 rem per hour (R/hr).
- TRU waste streams with D001 (Ignitable), D002 (Corrosive), and D003 (Reactive) RCRA hazardous waste numbers — This restriction is from the WIPP Hazardous Waste Permit (NMED 1999).
- Waste determined to be low-level waste, mixed low-level waste, high-level waste, or spent nuclear fuel — This restriction is mandated by the LWA.
- Total curies of RH-TRU waste shall not exceed 5.1 million curies — This limit is mandated by the LWA.

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<sup>4</sup> Pub. L. No. 96-164, § 213, 93 Stat. 1259, 1265 (1979).

<sup>5</sup> Pub. L. No. 102-579, §§ 2, 7, 106 Stat. 4777, 4779, 4785, 4786 (1992), as amended, Waste Isolation Pilot Plant Land Withdrawal Act Amendments, Pub. L. No. 104-201, §§ 3182, 3186, 110 Stat. 2422, 2851, 2852 (1996)

## 4.2 Potential WIPP Transuranic Waste

Categories of waste that eventually may become acceptable for disposal at WIPP include the following:

- Unknown — Potential TRU waste may come from TRU waste streams currently declared “unknown” (see Tables 4-1 and 4-2). These TRU wastes have not been characterized adequately to determine the final TRU waste form and/or other significant parameters. If these TRU wastes are characterized and meet the WIPP Waste Acceptance Criteria (WAC) (DOE 2006a), they will be included in the WIPP TRU waste inventory in the future.
- Pre-1970 buried TRU waste — Several DOE TRU waste sites (LANL, SRS, Hanford, INL, ORNL, and West Valley Demonstration Project) have TRU waste that was buried prior to 1970. INL is currently preparing pre-1970 buried TRU waste for shipment to WIPP as mandated by a federal district court order.<sup>6</sup> Two waste streams at Hanford Richland Operations (RL618-01 and RL618-07) have been added to potential waste in this report. SRS and ORNL have RCRA caps on pre-1970 buried TRU waste, and this waste will not be excavated or retrieved per the Government Accounting Office (GAO 2007).
- Defense determination pending — Some TRU waste streams require a formal defense determination.
- Newly-identified TRU waste — Newly-identified TRU waste not identified in the last collection period.
- Beryllium block TRU waste stream at INL — This waste stream includes beryllium blocks and outer shim control cylinders from the Advanced Test Reactor and may be considered in the future. The radionuclide concentrations are too high to be considered in this update.
- Any TRU waste contaminated with constituents other than those listed in Table II.C.4 of the WIPP Hazardous Waste Permit — This waste requires a permit modification or removal of hazardous waste numbers before shipment.
- All waste streams from the Hanford Office of River Protection (Hanford-RP) (tank wastes managed as high-level waste [HLW]), two sodium-bearing waste streams at INL, and sludge from Hanford RL K-Basin knock-out pots — Categorization as potential TRU waste based on CBFO correspondence (Moody 2007b).

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<sup>6</sup>Public Serv. Co. v. Kempthorne, 2006 U.S. Dist. LEXIS 34584 (D. Idaho May 25, 2006) (under rules of contract interpretation, the 1995 agreement between the U.S. Department of Energy and the State of Idaho requires the Department to remove transuranic waste in a subsurface disposal area as well as in an above ground storage area at the Department’s Idaho facility by 2018).

**Table 4-1. Potential CH-TRU Waste Streams**

| Waste Stream ID      | Waste Stream Name   | Final Form Stored Payload (m <sup>3</sup> ) | Final Form Projected Payload (m <sup>3</sup> ) | Final Form Anticipated Payload (m <sup>3</sup> ) |
|----------------------|---|---|--|--|
| BT-T006              | Neutron Sources   | 5.09E+01                                    | 0.00E+00                                       | 5.09E+01   |
| FR-MOX-MT02          | Framatome MOX [mixed oxide] Fuel Plant D&D TRU Heterogeneous Mixed Debris Waste | 4.16E-01                                    | 0.00E+00                                       | 4.16E-01   |
| FR-MOX-T01           | Framatome MOX Fuel Plant D&D TRU Heterogeneous Debris Waste                     | 5.62E+00                                    | 0.00E+00                                       | 5.62E+00   |
| IN-W146.699          | TRU HEAVY METAL SLUDGE  | 2.29E+00                                    | 0.00E+00                                       | 2.29E+00   |
| IN-W159.1072         | EVAPORATOR AND DISSOLVER SLUDGE: Direct Ship                                    | 1.89E+00                                    | 0.00E+00                                       | 1.89E+00   |
| IN-W325.1076         | PARTS: Cert-repack  | 4.16E-01                                    | 0.00E+00                                       | 4.16E-01   |
| IN-W325.679          | PARTS: Direct Ship  | 5.88E+00                                    | 0.00E+00                                       | 5.88E+00   |
| IN-W341.671          | ANL-W (MFC) HFEF ANALYTICAL CHEMISTRY AND META: Cert-repack                     | 2.08E-01                                    | 0.00E+00                                       | 2.08E-01   |
| IN-W341.954          | ANL-W (MFC) HFEF ANALYTICAL CHEMISTRY AND META: Direct Ship                     | 1.89E+00                                    | 0.00E+00                                       | 1.89E+00   |
| IN-W350.650          | WASTE MATERIAL :Direct Ship   | 2.08E-01                                    | 0.00E+00                                       | 2.08E-01   |
| IN-W350.923          | WASTE MATERIAL: Cert-repack   | 2.08E-01                                    | 0.00E+00                                       | 2.08E-01   |
| IN-W353.859          | SOLIDIFIED SOLUTIONS: Direct Ship   | 1.89E+00                                    | 0.00E+00                                       | 1.89E+00   |
| IN-W359.853          | Neutron Sources   | 8.32E-01                                    | 0.00E+00                                       | 8.32E-01   |
| IN-W360.852          | MISCELLANEOUS SOURCES:RH Direct Ship  | 2.08E-01                                    | 0.00E+00                                       | 2.08E-01   |
| IN-W360.912          | MISCELLANEOUS SOURCES: Cert-repack  | 2.08E-01                                    | 0.00E+00                                       | 2.08E-01   |
| LA-LA238HOR          | Pu-238 Homogeneous, Hazardous   | 8.32E-01                                    | 7.90E+00                                       | 8.74E+00   |
| LA-TA-03-17          | HEPA Filters  | 2.18E+01                                    | 0.00E+00                                       | 2.18E+01   |
| LA-TA-55-52          | Oil on vermiculite, corrosive waste not for disposal at WIPP (mixed).           | 6.24E-01                                    | 0.00E+00                                       | 6.24E-01   |
| LB-T002              | LBL - Waste   | 4.16E-01                                    | 0.00E+00                                       | 4.16E-01   |
| LL-T001              | R&D Glovebox Waste (Form 1)   | 0.00E+00                                    | 2.69E+02                                       | 2.69E+02   |
| LL-T003              | Combined metal scrap & incidental combust (Form 3)                              | 0.00E+00                                    | 4.76E+02                                       | 4.76E+02   |
| MC-W002              | USAMC TRU Waste   | 2.08E-01                                    | 0.00E+00                                       | 2.08E-01   |
| PA-A015 <sup>1</sup> | Transuranic – Solid   | 2.77E+00                                    | 0.00E+00                                       | 2.77E+00   |
| PA-W014 <sup>1</sup> | Transuranic Waste Liquid/Solids   | 3.48E+00                                    | 0.00E+00                                       | 3.48E+00   |
| RL618-01             | 618 - 10&11 Burial Grounds TRU Mixed Debris                                     | 9.13E+03                                    | 0.00E+00                                       | 9.13E+03   |
| RLRFET-01            | Rocky Flats TRU Mixed Debris  | 2.45E+02                                    | 0.00E+00                                       | 2.45E+02   |
| RP-TFC001            | Bismuth Phosphate Process TRU Solids  | 4.39E+02                                    | 0.00E+00                                       | 4.39E+02   |
| RP-W754              | 224 Waste   | 3.23E+02                                    | 0.00E+00                                       | 3.23E+02   |
| RP-W755              | Bismuth Phosphate Process TRU Solids  | 7.94E+02                                    | 0.00E+00                                       | 7.94E+02   |
| SP-T001              | (blank)   | 4.99E+01                                    | 0.00E+00                                       | 4.99E+01   |
| SR-T001-773A-CLAS    | CH-TRU - waste from 773A  | 1.25E+02                                    | 0.00E+00                                       | 1.25E+02   |
| SR-T001-WSB-1        | UNKNOWN   | 0.00E+00                                    | 4.91E+03                                       | 4.91E+03   |
| SR-T001-WSB-3        | UNKNOWN   | 0.00E+00                                    | 1.44E+02                                       | 1.44E+02   |

| Waste Stream ID    | Waste Stream Name                             | Final Form Stored Payload (m <sup>3</sup> ) | Final Form Projected Payload (m <sup>3</sup> ) | Final Form Anticipated Payload (m <sup>3</sup> ) |
|--------------------|---|---|--|--|
| SR-W026-MFFF-1     | UNKNOWN                                       | 0.00E+00                                    | 3.50E+03                                       | 3.50E+03   |
| SR-W026-PDCF-1     | UNKNOWN                                       | 0.00E+00                                    | 2.15E+03                                       | 2.15E+03   |
| SR-W026-WSB-2      | UNKNOWN                                       | 0.00E+00                                    | 6.26E+02                                       | 6.26E+02   |
| SR-W027-221H-HET-B | Heterogeneous debris from 221H                | 1.48E+01                                    | 0.00E+00                                       | 1.48E+01   |
| SR-W027-HBL-Box-B  | CH mixed TRU from 221H                        | 1.02E+02                                    | 0.00E+00                                       | 1.02E+02   |
| SR-W027-SRSG-SOIL  | CH mixed TRU Soil / Gravel (S4000)            | 3.33E+00                                    | 0.00E+00                                       | 3.33E+00   |
| VN-CHT001          | Heterogeneous debris                          | 2.02E+01                                    | 0.00E+00                                       | 2.02E+01   |
| WV-M005            | TRU Filters                                   | 1.20E+02                                    | 0.00E+00                                       | 1.20E+02   |
| WV-M007            | TRU General Waste                             | 1.08E+01                                    | 0.00E+00                                       | 1.08E+01   |
| WV-M008            | TRU Concrete                                  | 2.08E-01                                    | 0.00E+00                                       | 2.08E-01   |
| WV-M010            | TRU Spent Absorbents                          | 8.32E-01                                    | 0.00E+00                                       | 8.32E-01   |
| WV-M013            | Sweeping Compound                             | 1.87E+00                                    | 0.00E+00                                       | 1.87E+00   |
| WV-M015            | Chemical Process Cell General Waste           | 1.31E+01                                    | 0.00E+00                                       | 1.31E+01   |
| WV-T001            | Fissile Material - Solids                     | 3.12E+01                                    | 0.00E+00                                       | 3.12E+01   |
| WV-T004            | Fissile Material - Other                      | 6.24E-01                                    | 0.00E+00                                       | 6.24E-01   |
| WV-T006            | TRU General Waste                             | 1.04E+01                                    | 1.02E+01                                       | 2.06E+01   |
| WV-T009            | TRU General Laboratory Waste                  | 9.98E+00                                    | 2.12E+01                                       | 3.12E+01   |
| WV-T011            | TRU Glove Boxes                               | 3.39E+01                                    | 0.00E+00                                       | 3.39E+01   |
| WV-T014            | Chemical Process Cell Vessels                 | 2.70E+02                                    | 0.00E+00                                       | 2.70E+02   |
| WV-T016            | Chemical Process Cell Miscellaneous Equipment | 1.47E+02                                    | 0.00E+00                                       | 1.47E+02   |
| WV-T017            | Spent Filter Media                            | 2.29E+00                                    | 0.00E+00                                       | 2.29E+00   |
| WV-T018b           | Head End Cell Debris                          | 1.52E+02                                    | 2.75E+01                                       | 1.79E+02   |
| WV-T019            | FRS Pool Filters                              | 0.00E+00                                    | 1.87E+00                                       | 1.87E+00   |
| WV-T020            | PPC/XC2 PPE and DAW                           | 0.00E+00                                    | 2.27E+02                                       | 2.27E+02   |
| WV-W024            | TRU Lead                                      | 1.79E+01                                    | 0.00E+00                                       | 1.79E+01   |
| WV-Z001            | West Valley Buried TRU Waste                  | 1.35E+03                                    | 0.00E+00                                       | 1.35E+03   |
| <b>Grand Total</b> |   | <b>1.35E+04</b>                             | <b>1.24E+04</b>                                | <b>2.59E+04</b>                                  |

Data Source: CID Data Version D.6.06, LANL2008.

**Table 4-2. Potential RH-TRU Waste Streams**

| <b>Waste Stream ID</b> | <b>Waste Stream Name</b>  | <b>Final Form Stored Payload (m<sup>3</sup>)</b> | <b>Final Form Projected Payload (m<sup>3</sup>)</b> | <b>Final Form Anticipated Payload (m<sup>3</sup>)</b> |
|------------------------|---|--|---|---|
| AW-IN-TRA-BE-01        | TRA Beryllium Blocks  | 1.51E+01   | 1.07E+01  | 2.58E+01  |
| AW-W018                | SODIUM - TRU  | 4.45E+00   | 0.00E+00  | 4.45E+00  |
| AW-W019                | SODIUM POTASSIUM - NaK - TRU  | 8.90E-01   | 0.00E+00  | 8.90E-01  |
| AW-W029                | RSWF TRANSURANIC WASTE  | 1.25E+01   | 0.00E+00  | 1.25E+01  |
| AW-W048                | FCF Indirect RH-MTRU [mixed TRU] Waste                                | 1.78E+00   | 4.45E+00  | 6.23E+00  |
| IN-ID-RTC-S5000        | RH-TRU Debris waste from Reactor Technology Complex at THE INL        | 0.00E+00   | 1.49E+02  | 1.49E+02  |
| IN-SBW-01A             | SBW Treatment – Steam Reforming – Carbonate Waste Form                | 5.34E+02   | 0.00E+00  | 5.34E+02  |
| IN-SBW-01B             | SBW Treatment – Steam Reforming – Debris                              | 0.00E+00   | 8.90E+01  | 8.90E+01  |
| RL105-09A              | 105KE knock out pots - TRU RH mixed solidified inorganics             | 8.90E-01   | 0.00E+00  | 8.90E-01  |
| RL618-07               | 618 - 10&11 Burial Grounds TRU RH Non-mixed Debris                    | 1.31E+02   | 0.00E+00  | 1.31E+02  |
| RLCH2-08               | Tank Farms TRU RH Mixed Debris  | 2.94E+02   | 0.00E+00  | 2.94E+02  |
| RP-TFC002              | Bismuth Phosphate Process TRU Solids mixed with Fission Product Waste | 1.92E+03   | 0.00E+00  | 1.92E+03  |
| RP-TFC003              | Bismuth Phosphate Process TRU Solids mixed with Fission Product Waste | 2.58E+02   | 0.00E+00  | 2.58E+02  |
| RP-W013                | PFP TRU Solids  | 4.10E+02   | 0.00E+00  | 4.10E+02  |
| RP-W016                | PUREX TRU Cladding Removal Solids                                     | 1.28E+03   | 0.00E+00  | 1.28E+03  |
| VN-RHT001              | Heterogeneous debris  | 1.25E+01   | 0.00E+00  | 1.25E+01  |
| WV-T018a               | Head End Cell Debris  | 2.85E+01   | 0.00E+00  | 2.85E+01  |
| WV-T021                | Remote-handled waste facility (RHWF) Process                          | 0.00E+00   | 1.16E+02  | 1.16E+02  |
| <b>Grand Total</b>     |   | <b>4.90E+03</b>                                  | <b>3.68E+02</b>                                     | <b>5.27E+03</b>                                       |

Data Source: CID Data Version D.6.06, LANL 2008.

<sup>1</sup> Paducah would not report a final form container in the inventory and the information had to be added in the table manually.



## 5.0 SUMMARY

This report is an update of the TWBIR-2004, which documented the total estimated inventory of TRU waste as defined by the DOE TRU waste sites in support of the PABC for the CRA-2004. The TWBIR-2004 cut-off date for data collection was September 30, 2002. Like the TWBIR-2004, this report focuses on changes resulting from characterization, improved estimations, continued generation, and WIPP emplacement. The cut-off date for data collection for this report was December 31, 2006.

This report contains the information required for PA modeling calculations, as well as additional information helpful for TRU waste management and strategic decisions. Beginning with this report, site inventory information will be updated annually to track changes in the TRU waste inventory.

The information in this report was collected from and validated by the DOE TRU waste sites and entered into the newly-qualified CID database. The CID includes estimates for: 1) disposal waste volumes (stored, projected, and emplaced); 2) radionuclides (unscaled, disposal, and decayed); 3) waste material parameters average densities; 4) disposal complexing agents; 5) disposal oxyanions; 6) solidified disposal cements; 7) disposal packaging materials; and 8) the disposal materials used to emplace TRU waste in the WIPP repository.

This report includes WIPP-bound waste, emplaced waste, potential TRU waste, inventory comparisons, radiological data (with radionuclides decayed to seven time periods for use in PA), and a historic crosswalk of TRU waste streams in Appendices A, B, C, D, E, and F, respectively.

On October 18, 2007, LANL-CO received a letter from the CBFO manager instructing the inventory team that “all waste streams from the Hanford Office of River Protection (tank wastes managed as HLW) and the two sodium-bearing waste streams from the Idaho National Laboratory (INL) shall be categorized as potential WIPP waste. In addition, the sludge from the Hanford Richland Operations (RL) K-Basin knock-out pots shall also be included in a separate waste stream and placed in the potential WIPP waste category” (Moody 2007b).

This revision is the result of the discovery of a calculation error based on the methodology used by LANL to report radionuclide activity concentration for their waste streams. This report provides the revised waste stream radionuclide concentrations based on the application of radionuclide activity over the entire waste stream volume. The inventory team made these changes in the CID and ensured that site validation of the changes was completed.

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**ANNUAL TRANSURANIC WASTE INVENTORY REPORT – 2007**  
**APPENDIX A**  
**WIPP-Bound Waste**

The following waste stream profiles contain information on waste streams that are being considered for shipment to WIPP at this time and are expected to meet the Transuranic Waste Acceptance Criteria for the WIPP (DOE 2006b) as of the inventory date, December 31, 2006. In addition, waste that has already been shipped to WIPP is identified with a waste stream ID ending in “-S”, and volumes for these waste streams are recorded in the “Shipped” category.

The TRU waste sites that have reported WIPP-bound waste streams are:

|  |    |
|--|----|
| Argonne National Laboratory – East                     | AE |
| Argonne National Laboratory – West (currently MFC)     | AW |
| Bettis Atomic Power Laboratory                         | BT |
| Idaho National Laboratory                              | IN |
| Knolls Atomic Power Laboratory – Schenectady           | KA |
| Knolls Atomic Power Laboratory – Nuclear Fuels Service | KN |
| Los Alamos National Laboratory                         | LA |
| Lawrence Berkeley Laboratory                           | LB |
| Lawrence Livermore National Laboratory                 | LL |
| U. S. Army Materiel Command                            | MC |
| Nevada Test Site                                       | NT |
| Oak Ridge National Laboratory                          | OR |
| Rocky Flats Environmental Technology Site <sup>1</sup> | RF |
| Hanford (Richland)                                     | RL |
| Sandia National Laboratories (Albuquerque)             | SA |
| Savannah River Site                                    | SR |

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<sup>1</sup> Although RFETS waste has been completely shipped to WIPP, the site is still represented in the WIPP-bound waste profiles. All volumes recorded on these profiles are in the “Shipped” category.

Waste Stream ID: **AECHDM-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                    |                                       |                 |                   |            |          |    |
|-------------|------------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Argonne National Laboratory - East | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | N/A                                | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner         | WP-AECHDM         | 56.6         |
| 55-gal Drum Dir Ld w/o Liner        | WP-AECHDM         | 0.2          |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-AECHDM         | 47.9         |
| <b>Shipped Total</b>                |                   | <b>104.7</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 76.72                                |
| Aluminum-based Metals/Alloys | 1.41                                 |
| Other Metals                 | 6.14                                 |
| Other Inorganic Materials    | 6.37                                 |
| Cellulosics                  | 5.55                                 |
| Rubber                       | 10.96                                |
| Plastics                     | 40.03                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 1.88                                 |
| Organic Matrix               | 0.88                                 |
| Soils/gravel                 | 0.11                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.19E-01                                   |
| Am-243  | 1.80E-02                                   |
| Cm-244  | 1.16E-03                                   |
| Cs-137  | 1.74E-02                                   |
| Np-237  | 1.17E-03                                   |
| Pu-238  | 6.15E-01                                   |
| Pu-239  | 8.16E-01                                   |
| Pu-240  | 6.18E-01                                   |
| Pu-241  | 9.02E-01                                   |
| Pu-242  | 2.50E-04                                   |
| Pu-244  | 1.92E-19                                   |
| Sr-90   | 1.81E-02                                   |
| Th-229  | 8.16E-05                                   |
| Th-230  | 2.03E-08                                   |
| Th-232  | 4.07E-18                                   |
| U-233   | 4.01E-04                                   |
| U-234   | 7.54E-04                                   |
| U-235   | 1.43E-05                                   |
| U-236   | 5.49E-08                                   |
| U-238   | 4.21E-04                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D021, D027, D028, D030, D037, F001, F002, F003, F004, F005

## TRUCON Code(s)

116/216

## Waste Stream Description

N/A



Waste Stream ID: **AECHHM-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                    |                       |                       |                   |                                       |          |    |
|-------------|------------------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Argonne National Laboratory - East | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3110                                 | Handling | CH |
| Source Cat. | N/A                                | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                   |             |
|-------------------------------------|-------------------|-------------|
| Container Type                      | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner         | WP-AECHHM         | 9.4         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-AECHHM         | 4.8         |
| <b>Shipped Total</b>                |                   | <b>14.2</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 0.00                                 |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 0.00                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 348.27                               |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.04E+00                                   |
| Am-243  | 3.63E-04                                   |
| Cs-137  | 1.01E-04                                   |
| Np-237  | 1.21E-04                                   |
| Pu-238  | 3.17E-01                                   |
| Pu-239  | 2.92E+00                                   |
| Pu-240  | 1.16E+00                                   |
| Pu-241  | 3.11E-13                                   |
| Pu-242  | 1.43E-04                                   |
| Sr-90   | 1.05E-04                                   |
| Th-229  | 2.27E-05                                   |
| Th-230  | 1.02E-08                                   |
| Th-232  | 7.67E-18                                   |
| U-233   | 1.57E-09                                   |
| U-234   | 3.79E-04                                   |
| U-235   | 7.46E-06                                   |
| U-236   | 1.04E-07                                   |
| U-238   | 1.90E-04                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D027, D028, D030, D035, D036, D037, F001, F002, F003, F004, F005

## TRUCON Code(s)

111/211

## Waste Stream Description

N/A

Waste Stream ID: **AE-T001**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                    |                       |                 |                                       |            |          |    |
|-------------|------------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Argonne National Laboratory - East | Final Waste Form      | Combustible     | Waste Matrix Code                     | S5420      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste           | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | ANL-E Contact-Handled Mixed Debris |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |             |             |
|-----------------------------|------------|-------------|-------------|
| Container Type              | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner | 1.7        | 66.1        | 67.8        |
| <b>Current Form Total</b>   | <b>1.7</b> | <b>66.1</b> | <b>67.8</b> |

| Final Form Volumes          |            |             |             |
|-----------------------------|------------|-------------|-------------|
| Container Type              | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner | 1.7        | 66.1        | 67.8        |
| <b>Final Form Total</b>     | <b>1.7</b> | <b>66.1</b> | <b>67.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 77.00                                |
| Aluminum-based Metals/Alloys    | 8.68                                 |
| Other Metals                    | 23.30                                |
| Other Inorganic Materials       | 4.78                                 |
| Cellulosics                     | 5.99                                 |
| Rubber                          | 7.32                                 |
| Plastics                        | 63.40                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.64                                 |
| Organic Matrix                  | 0.42                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.65E-01                                   |
| Cs-137  | 2.12E-02                                   |
| Np-237  | 4.28E-03                                   |
| Pu-238  | 7.51E-02                                   |
| Pu-239  | 9.11E-01                                   |
| Pu-240  | 5.38E-01                                   |
| Pu-241  | 8.59E-01                                   |
| Pu-242  | 4.37E-04                                   |
| Sr-90   | 1.49E-02                                   |
| Th-229  | 1.12E-06                                   |
| Th-230  | 1.01E-08                                   |
| Th-232  | 3.96E-07                                   |
| U-233   | 6.00E-04                                   |
| U-234   | 5.86E-05                                   |
| U-235   | 1.80E-05                                   |
| U-236   | 4.46E-07                                   |
| U-238   | 3.18E-04                                   |

## Haz. Waste No(s).

D005, D006, D007,  
D008, D009, D011

## TRUCON Code(s)

116/216

## Waste Stream Description

Organic debris, plastic, rubber, paper, cloth. Waste stream identifiers previously referred to as AE-W041 and AE-W042 are now included with waste stream AE-T001.

Waste Stream ID: **AE-T003**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                                       |            |          |    |
|-------------|---|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Argonne National Laboratory - East            | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3110      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste                      | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | ANL-E Contact-Handled Mixed Homogenous Solids |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |             |             |
|-----------------------------|------------|-------------|-------------|
| Container Type              | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner | 6.7        | 13.3        | 20.0        |
| <b>Current Form Total</b>   | <b>6.7</b> | <b>13.3</b> | <b>20.0</b> |

| Final Form Volumes          |            |             |             |
|-----------------------------|------------|-------------|-------------|
| Container Type              | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner | 6.7        | 13.3        | 20.0        |
| <b>Final Form Total</b>     | <b>6.7</b> | <b>13.3</b> | <b>20.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 101.00                               |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 79.00                                |
| Inorganic Matrix                | 216.30                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.49E-01                                   |
| Cs-137  | 2.57E-04                                   |
| Np-237  | 6.22E-04                                   |
| Pu-238  | 4.41E-02                                   |
| Pu-239  | 1.24E+00                                   |
| Pu-240  | 4.79E-01                                   |
| Pu-241  | 2.08E+00                                   |
| Pu-242  | 1.34E-05                                   |
| Sr-90   | 6.51E-04                                   |
| Th-229  | 6.90E-07                                   |
| Th-230  | 2.42E-10                                   |
| Th-232  | 1.14E-16                                   |
| U-233   | 4.09E-04                                   |
| U-234   | 2.68E-06                                   |
| U-235   | 3.24E-06                                   |
| U-236   | 2.56E-07                                   |
| U-238   | 7.14E-05                                   |

## Haz. Waste No(s).

D004, D005, D006,  
D007, D008, D009,  
D010, D011, D018,  
D019, D021, D027,  
D028, D030, D035,  
D036, D037, F001,  
F002, F003, F004,  
F005

## TRUCON Code(s)

129/229

## Waste Stream Description

Solidified inorganic liquid waste from evaporator bottom. Waste stream identifiers previously referred to as AE-W038, AE-W039 and AE-W040 are now included with waste stream AE-T001.

Waste Stream ID: **AE-T009**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                    |                                       |                        |                   |            |          |    |
|-------------|------------------------------------|---------------------------------------|------------------------|-------------------|------------|----------|----|
| Site        | Argonne National Laboratory - East | Final Waste Form                      | Heterogeneous          | Waste Matrix Code | S5490      | Handling | RH |
| Source Cat. | R&D/R&D Laboratory Waste           | Defense Determination                 | Likely Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | RH TRU                             | Activity Concentrations Decayed to CY |                        |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |             |             |
|---------------------------|------------|-------------|-------------|
| Container Type            | Stored     | Proj.       | Total       |
| 30-gal Drum               | 7.7        | 22.6        | 30.3        |
| <b>Current Form Total</b> | <b>7.7</b> | <b>22.6</b> | <b>30.3</b> |

| Final Form Volumes                          |             |             |             |
|---|-------------|-------------|-------------|
| Container Type                              | Stored      | Proj.       | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 10.7        | 32.0        | 42.7        |
| <b>Final Form Total</b>                     | <b>10.7</b> | <b>32.0</b> | <b>42.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 61.60                                |
| Aluminum-based Metals/Alloys    | 18.60                                |
| Other Metals                    | 79.60                                |
| Other Inorganic Materials       | 10.80                                |
| Cellulosics                     | 0.90                                 |
| Rubber                          | 9.00                                 |
| Plastics                        | 21.10                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 10.40                                |
| Organic Matrix                  | 13.20                                |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.53E-02                                   |
| Am-243  | 2.65E-07                                   |
| Cm-244  | 1.34E-03                                   |
| Cs-137  | 3.47E-01                                   |
| Np-237  | 1.40E-05                                   |
| Pu-238  | 7.44E-02                                   |
| Pu-239  | 1.47E-01                                   |
| Pu-240  | 3.21E-02                                   |
| Pu-241  | 2.06E-01                                   |
| Sr-90   | 1.96E-01                                   |
| Th-229  | 4.47E-09                                   |
| Th-230  | 1.08E-09                                   |
| Th-232  | 2.26E-17                                   |
| U-233   | 1.54E-06                                   |
| U-234   | 7.42E-06                                   |
| U-235   | 1.30E-06                                   |
| U-236   | 2.95E-08                                   |
| U-238   | 5.10E-07                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

## Waste Stream Description

This waste is generated primarily as a result of fuel research activities.

Waste Stream ID: **MU-W002-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                    |                                       |                 |                   |            |          |    |
|-------------|------------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Argonne National Laboratory - East | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | N/A                                | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                   |            |
|-------------------------------------|-------------------|------------|
| Container Type                      | Ref. Waste Stream | Volume     |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-MU-W002        | 4.8        |
| <b>Shipped Total</b>                |                   | <b>4.8</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 6.68                                 |
| Aluminum-based Metals/Alloys | 2.17                                 |
| Other Metals                 | 0.02                                 |
| Other Inorganic Materials    | 2.73                                 |
| Cellulosics                  | 0.10                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 2.67                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.46E+00                                   |
| Am-243  | 2.38E-04                                   |
| Cs-137  | 3.57E-07                                   |
| Np-237  | 8.05E-04                                   |
| Pu-239  | 4.73E-03                                   |
| Sr-90   | 3.72E-07                                   |
| Th-229  | 2.29E-04                                   |
| Th-230  | 4.02E-16                                   |
| U-233   | 1.05E-08                                   |
| U-234   | 2.98E-11                                   |
| U-235   | 1.40E-11                                   |
| U-238   | 3.62E-06                                   |

## Haz. Waste No(s).

D006, D011

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **AW-N026.82**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                        |                   |            |          |    |
|-------------|--|---------------------------------------|------------------------|-------------------|------------|----------|----|
| Site        | Argonne National Laboratory - West                 | Final Waste Form                      | Heterogeneous          | Waste Matrix Code | S5440      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Likely Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | ALHC UPGRADE DECON DEBRIS                          | Activity Concentrations Decayed to CY |                        |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes               |            |            |            |
|------------------------------------|------------|------------|------------|
| Container Type                     | Stored     | Proj.      | Total      |
| SWB w/ 4 - 55-gal Drums w/o Liners | 3.8        | 0.0        | 3.8        |
| <b>Current Form Total</b>          | <b>3.8</b> | <b>0.0</b> | <b>3.8</b> |

| Final Form Volumes                 |            |            |            |
|------------------------------------|------------|------------|------------|
| Container Type                     | Stored     | Proj.      | Total      |
| SWB w/ 4 - 55-gal Drums w/o Liners | 3.8        | 0.0        | 3.8        |
| <b>Final Form Total</b>            | <b>3.8</b> | <b>0.0</b> | <b>3.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 236.00                               |
| Aluminum-based Metals/Alloys    | 42.00                                |
| Other Metals                    | 7.00                                 |
| Other Inorganic Materials       | 52.00                                |
| Cellulosics                     | 81.00                                |
| Rubber                          | 18.00                                |
| Plastics                        | 68.00                                |
| Cements                         | 296.40                               |
| Inorganic Matrix                | 5.00                                 |
| Organic Matrix                  | 1.00                                 |
| Soils/gravel                    | 3.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 211.10                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Cs-137  | 1.10E+00                                   |
| Pu-239  | 9.30E-03                                   |
| Sr-90   | 5.47E+00                                   |
| U-235   | 1.19E-10                                   |

## Haz. Waste No(s).

D006, D007, D008

## TRUCON Code(s)

125/225

## Waste Stream Description

Paint scraping debris from analytical lab hot cell refurbishment. Bags of lead-lined gloves were placed in the solidified CO<sub>2</sub> bead blasting waste drums to fill the void spaces. The leftover gloves were placed in a separate 30-gallon drum. 1710 lbs of waste are in two TRU SWBs; Container numbers MW-S-94-02 AND MW-S-94-03.

Waste Stream ID: **AW-N027.531**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                        |                                       |            |          |    |
|-------------|--|-----------------------|------------------------|---------------------------------------|------------|----------|----|
| Site        | Argonne National Laboratory - West                 | Final Waste Form      | Combustible            | Waste Matrix Code                     | S5311      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Likely Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | LEAD CONTAMINATED WASTE                            |                       |                        | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.8        | 3.3        | 4.2        |
| <b>Current Form Total</b>   | <b>0.8</b> | <b>3.3</b> | <b>4.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.8        | 3.3        | 4.2        |
| <b>Final Form Total</b>     | <b>0.8</b> | <b>3.3</b> | <b>4.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 109.00                               |
| Aluminum-based Metals/Alloys    | 0.20                                 |
| Other Metals                    | 50.00                                |
| Other Inorganic Materials       | 15.00                                |
| Cellulosics                     | 191.00                               |
| Rubber                          | 30.00                                |
| Plastics                        | 59.00                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.07E-03                                   |
| Np-237  | 9.67E-09                                   |
| Pu-238  | 4.00E+00                                   |
| Pu-239  | 3.26E+00                                   |
| Pu-240  | 1.97E-02                                   |
| Pu-241  | 1.13E-02                                   |
| Pu-242  | 2.48E-07                                   |
| Th-229  | 2.84E-10                                   |
| Th-230  | 7.33E-09                                   |
| Th-232  | 1.44E-18                                   |
| U-233   | 3.03E-07                                   |
| U-234   | 1.40E-04                                   |
| U-235   | 2.11E-06                                   |
| U-236   | 5.84E-09                                   |
| U-238   | 7.73E-09                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

125/225

## Waste Stream Description

This waste stream is typically lead-lined gloves removed from Casting Lab and Analytical Laboratory glove boxes.

Waste Stream ID: **AW-T031.1322**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                        |                                       |            |          |    |
|-------------|--|-----------------------|------------------------|---------------------------------------|------------|----------|----|
| Site        | Argonne National Laboratory - West                 | Final Waste Form      | Heterogeneous          | Waste Matrix Code                     | S5420      | Handling | RH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Likely Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | FCF (RH) MISCELLANEOUS TRU WASTE                   |                       |                        | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |            |             |             |
|-----------------------------------|------------|-------------|-------------|
| Container Type                    | Stored     | Proj.       | Total       |
| Canister - (MFC) o/p 45-gal Drums | 0.0        | 10.9        | 10.9        |
| Liner - RSWF                      | 1.1        | 0.0         | 1.1         |
| <b>Current Form Total</b>         | <b>1.1</b> | <b>10.9</b> | <b>12.0</b> |

| Final Form Volumes           |            |             |             |
|------------------------------|------------|-------------|-------------|
| Container Type               | Stored     | Proj.       | Total       |
| RH Can w/ Remov Lid - Dir Ld | 0.9        | 14.2        | 15.1        |
| <b>Final Form Total</b>      | <b>0.9</b> | <b>14.2</b> | <b>15.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 179.90                               |
| Aluminum-based Metals/Alloys    | 32.30                                |
| Other Metals                    | 5.40                                 |
| Other Inorganic Materials       | 40.00                                |
| Cellulosics                     | 62.20                                |
| Rubber                          | 13.70                                |
| Plastics                        | 51.80                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 3.60                                 |
| Organic Matrix                  | 0.60                                 |
| Soils/gravel                    | 2.30                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.98E-02                                   |
| Am-243  | 1.14E-05                                   |
| Cm-244  | 1.05E-04                                   |
| Cs-137  | 3.15E+02                                   |
| Np-237  | 3.69E-05                                   |
| Pu-238  | 2.58E-02                                   |
| Pu-239  | 8.67E-05                                   |
| Pu-240  | 4.16E-01                                   |
| Pu-241  | 8.00E-01                                   |
| Pu-242  | 1.16E-05                                   |
| Sr-90   | 4.19E+02                                   |
| Th-229  | 2.84E-12                                   |
| Th-230  | 3.70E-09                                   |
| Th-232  | 4.95E-16                                   |
| U-233   | 1.03E-08                                   |
| U-234   | 1.37E-04                                   |
| U-235   | 8.67E-05                                   |
| U-236   | 3.36E-06                                   |
| U-238   | 3.66E-07                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

## Waste Stream Description

Fuel Conditioning Facility (FCF) and Hot Fuel Examination Facility (HFEF) Remote-handled (RH) Radioactive Transuranic Miscellaneous waste: hot laboratory waste, filters, etc.



Waste Stream ID: **AW-T033.1325**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                    |                                       |                 |                   |            |          |    |
|-------------|------------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Argonne National Laboratory - West | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | Analytical Laboratory Waste        | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | ANL-752 TRU WASTE                  | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |             |             |
|-----------------------------|------------|-------------|-------------|
| Container Type              | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner | 2.9        | 20.0        | 22.9        |
| <b>Current Form Total</b>   | <b>2.9</b> | <b>20.0</b> | <b>22.9</b> |

| Final Form Volumes          |            |             |             |
|-----------------------------|------------|-------------|-------------|
| Container Type              | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner | 2.9        | 20.0        | 22.9        |
| <b>Final Form Total</b>     | <b>2.9</b> | <b>20.0</b> | <b>22.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 236.00                               |
| Aluminum-based Metals/Alloys    | 42.00                                |
| Other Metals                    | 7.00                                 |
| Other Inorganic Materials       | 52.00                                |
| Cellulosics                     | 81.00                                |
| Rubber                          | 18.00                                |
| Plastics                        | 68.00                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 5.00                                 |
| Organic Matrix                  | 1.00                                 |
| Soils/gravel                    | 3.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.04E-03                                   |
| Np-237  | 7.69E-09                                   |
| Pu-238  | 4.07E+00                                   |
| Pu-239  | 3.26E+00                                   |
| Pu-240  | 1.97E-02                                   |
| Pu-241  | 1.24E-02                                   |
| Pu-242  | 2.48E-07                                   |
| Th-229  | 2.27E-10                                   |
| Th-230  | 5.02E-09                                   |
| Th-232  | 9.23E-19                                   |
| U-233   | 3.03E-07                                   |
| U-234   | 1.17E-04                                   |
| U-235   | 2.11E-06                                   |
| U-236   | 4.67E-09                                   |
| U-238   | 7.73E-09                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Transuranic waste generated from Casting Laboratory (CL), formerly known as Plutonium Casting Lab (PCL) and the Experimental Fuels Lab (EFL), and Analytical Laboratory (AL) Hot cell operations. This waste is typically packaged in 55-gallon drums.

Waste Stream ID: **AW-W020.13**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                    |                       |                        |                                       |            |          |    |
|-------------|------------------------------------|-----------------------|------------------------|---------------------------------------|------------|----------|----|
| Site        | Argonne National Laboratory - West | Final Waste Form      | Solidified Inorganics  | Waste Matrix Code                     | S3113      | Handling | RH |
| Source Cat. | R&D/R&D Laboratory Waste           | Defense Determination | Likely Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | TRU-CD-HOT CELL WASTE              |                       |                        | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |             |
|---------------------------|------------|------------|-------------|
| Container Type            | Stored     | Proj.      | Total       |
| 45-gal Drum               | 0.3        | 9.2        | 9.5         |
| Liner - RSWF              | 0.4        | 0.0        | 0.4         |
| Liner - RSWF              | 0.5        | 0.0        | 0.5         |
| <b>Current Form Total</b> | <b>1.2</b> | <b>9.2</b> | <b>10.4</b> |

| Final Form Volumes           |            |            |             |
|------------------------------|------------|------------|-------------|
| Container Type               | Stored     | Proj.      | Total       |
| RH Can w/ Remov Lid - Dir Ld | 0.9        | 9.8        | 10.7        |
| <b>Final Form Total</b>      | <b>0.9</b> | <b>9.8</b> | <b>10.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 126.80                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.50                                 |
| Other Inorganic Materials       | 56.50                                |
| Cellulosics                     | 0.20                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.50                                 |
| Cements                         | 296.40                               |
| Inorganic Matrix                | 315.90                               |
| Organic Matrix                  | 0.10                                 |
| Soils/gravel                    | 0.50                                 |
| Vitrified                       | 22.70                                |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.53E-01                                   |
| Cs-137  | 1.49E+01                                   |
| Np-237  | 9.55E-06                                   |
| Pu-239  | 5.62E-01                                   |
| Pu-240  | 1.76E-01                                   |
| Pu-241  | 2.63E+01                                   |
| Sr-90   | 2.87E+00                                   |
| Th-229  | 1.36E-05                                   |
| Th-230  | 2.46E-08                                   |
| Th-232  | 2.18E-17                                   |
| U-233   | 1.12E-02                                   |
| U-234   | 2.10E-04                                   |
| U-235   | 1.42E-04                                   |
| U-236   | 6.78E-08                                   |
| U-238   | 2.29E-05                                   |

## Haz. Waste No(s).

D006, D007, D008

## TRUCON Code(s)

325

## Waste Stream Description

This waste stream consisted of metallic cadmium, salts, and associated cleanup materials (paper towels and cloth rags). Waste also includes RCRA metal contaminated remote-handled TRU-Mixed HEPA filters from the Analytical Lab. The waste is contaminated with activation and fission products as well as with plutonium. This waste stream is generated from Fuel Conditioning Facility Demonstration support experiments; the analysis of fuels in the hot cells. Waste is stored in the Radioactive Scrap and Waste Facility and Sodium Storage Building. Future waste generation will be small because evaporation as part of the process will be done in the hot cell to minimize the volume.

Waste Stream ID: **AW-W026**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                        |                                       |            |          |    |
|-------------|--|-----------------------|------------------------|---------------------------------------|------------|----------|----|
| Site        | Argonne National Laboratory - West                 | Final Waste Form      | Heterogeneous          | Waste Matrix Code                     | S5440      | Handling | RH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Likely Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | ALHC Upgrade Decon Debris                          |                       |                        | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| Liner - RSWF              | 0.2        | 0.0        | 0.2        |
| Liner - RSWF              | 0.5        | 0.0        | 0.5        |
| <b>Current Form Total</b> | <b>0.7</b> | <b>0.0</b> | <b>0.7</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid - Dir Ld | 0.9        | 0.0        | 0.9        |
| <b>Final Form Total</b>      | <b>0.9</b> | <b>0.0</b> | <b>0.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 97.00                                |
| Aluminum-based Metals/Alloys    | 1.80                                 |
| Other Metals                    | 203.60                               |
| Other Inorganic Materials       | 11.20                                |
| Cellulosics                     | 6.30                                 |
| Rubber                          | 0.40                                 |
| Plastics                        | 4.10                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.76E-01                                   |
| Cs-137  | 1.71E-01                                   |
| Np-237  | 7.50E-07                                   |
| Pu-239  | 3.16E-02                                   |
| Sr-90   | 6.05E-01                                   |
| Th-229  | 8.61E-15                                   |
| Th-230  | 9.45E-16                                   |
| U-233   | 2.12E-11                                   |
| U-234   | 1.62E-11                                   |
| U-235   | 3.25E-06                                   |
| U-238   | 4.42E-07                                   |

## Haz. Waste No(s).

D006, D007, D008

## TRUCON Code(s)

325

## Waste Stream Description

Waste packaged for WIPP containing remote-handled radioactive cadmium contaminated debris from CH-ANL-242T and remote-handled waste similar to AW-N026.82, solidified to meet WIPP-WAC requirement for particulate immobilization. RSWF Containers SN-161 and T-46.

Waste Stream ID: **AW-W028**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                        |                   |            |          |    |
|-------------|--|---------------------------------------|------------------------|-------------------|------------|----------|----|
| Site        | Argonne National Laboratory - West           | Final Waste Form                      | Filter                 | Waste Matrix Code | S5410      | Handling | RH |
| Source Cat. | Pollution Control or Waste Treatment Process | Defense Determination                 | Likely Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | TRU Waste Used Pre-Filters.                  | Activity Concentrations Decayed to CY |                        |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| 45-gal Drum               | 0.3        | 5.4        | 5.8        |
| Bin - Metal               | 3.8        | 0.0        | 3.8        |
| <b>Current Form Total</b> | <b>4.1</b> | <b>5.4</b> | <b>9.6</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid - Dir Ld | 1.8        | 5.3        | 7.1        |
| <b>Final Form Total</b>      | <b>1.8</b> | <b>5.3</b> | <b>7.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 28.90                                |
| Other Metals                    | 72.30                                |
| Other Inorganic Materials       | 57.80                                |
| Cellulosics                     | 101.20                               |
| Rubber                          | 28.90                                |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Cs-137  | 2.99E-01                                   |
| Pu-239  | 3.50E-02                                   |
| Pu-240  | 1.84E-03                                   |
| Sr-90   | 8.29E-01                                   |
| Th-230  | 2.07E-15                                   |
| Th-232  | 2.28E-19                                   |
| U-234   | 3.55E-11                                   |
| U-235   | 1.80E-06                                   |
| U-236   | 7.09E-10                                   |
| U-238   | 9.70E-07                                   |

## Haz. Waste No(s).

D006, D007, D008

## TRUCON Code(s)

325

## Waste Stream Description

This waste stream consists of metal or wood-framed filters. Pre-Filters are 2'x2'x0.5', standard HEPA filters are 2'x2'x1'. The filters have screen mesh covering high efficiency filtering media. The concentration of radioisotopes and RCRA metals varies in each filter. These filters were generated from the decontamination of the analytical hot cells in 1993 and 1994, and subsequent hot cell filter changeouts in the Analytical Lab and the Fuel Conditioning Facility.

Waste Stream ID: **AW-W046**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                        |                                       |            |          |    |
|-------------|--|-----------------------|------------------------|---------------------------------------|------------|----------|----|
| Site        | Argonne National Laboratory - West           | Final Waste Form      | Heterogeneous          | Waste Matrix Code                     | S5400      | Handling | RH |
| Source Cat. | Pollution Control or Waste Treatment Process | Defense Determination | Likely Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | FCF RLWS Filters and Resin                   |                       |                        | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| 45-gal Drum               | 0.3        | 3.1        | 3.4        |
| <b>Current Form Total</b> | <b>0.3</b> | <b>3.1</b> | <b>3.4</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid - Dir Ld | 0.9        | 3.6        | 4.5        |
| <b>Final Form Total</b>      | <b>0.9</b> | <b>3.6</b> | <b>4.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 24.70                                |
| Aluminum-based Metals/Alloys    | 1.80                                 |
| Other Metals                    | 2.00                                 |
| Other Inorganic Materials       | 469.70                               |
| Cellulosics                     | 10.52                                |
| Rubber                          | 0.40                                 |
| Plastics                        | 21.04                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Cs-137  | 8.60E+02                                   |
| Pu-239  | 1.20E-01                                   |
| Sr-90   | 9.37E+02                                   |
| U-235   | 2.86E-04                                   |

## Haz. Waste No(s).

D006

## TRUCON Code(s)

325

## Waste Stream Description

The filters consist of two types. One is a depth filter made entirely of polypropylene. The other is a pleated filter made up of a glass fiber filter media with polyester support. This media is housed in a polypropylene cage with silicone O-rings. The filters are used primarily for the removal of cadmium. However, they also remove uranium and plutonium.

Waste Stream ID: **AW-W047**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                        |                   |            |          |    |
|-------------|--|---------------------------------------|------------------------|-------------------|------------|----------|----|
| Site        | Argonne National Laboratory - West                 | Final Waste Form                      | Heterogeneous          | Waste Matrix Code | S5400      | Handling | RH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Likely Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | FCF Crucible (Graphite)                            | Activity Concentrations Decayed to CY |                        |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| 45-gal Drum               | 0.2        | 1.5        | 1.7        |
| <b>Current Form Total</b> | <b>0.2</b> | <b>1.5</b> | <b>1.7</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid - Dir Ld | 0.9        | 1.8        | 2.7        |
| <b>Final Form Total</b>      | <b>0.9</b> | <b>1.8</b> | <b>2.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 194.00                               |
| Aluminum-based Metals/Alloys    | 1.80                                 |
| Other Metals                    | 418.00                               |
| Other Inorganic Materials       | 11.20                                |
| Cellulosics                     | 6.30                                 |
| Rubber                          | 0.40                                 |
| Plastics                        | 4.10                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Cs-137  | 1.46E+02                                   |
| Pu-239  | 8.16E-04                                   |
| Sr-90   | 1.59E+02                                   |
| U-235   | 2.41E-12                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

315

## Waste Stream Description

The crucible waste stream in the Fuel Conditioning Facility (FCF) has been characterized as TRU waste. Waste is loaded into 45-gallon RH-TRU inner waste cans. Containers are filled with crushed graphite crucible material, and are shipped for storage in the Radioactive Scrap and Waste Facility (RSWF). Before crushing, crucibles are cleaned to their clean tare weight. Based on samples taken on crushed crucible material, there are only a few tenths of grams of fissile material (U-235 or Pu-239) present per crucible disposed.

Waste Stream ID: **AW-W049**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                    |                                       |                        |                   |            |          |    |
|-------------|------------------------------------|---------------------------------------|------------------------|-------------------|------------|----------|----|
| Site        | Argonne National Laboratory - West | Final Waste Form                      | Heterogeneous          | Waste Matrix Code | S5440      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste           | Defense Determination                 | Likely Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | FMF glovebox waste                 | Activity Concentrations Decayed to CY |                        |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.0        | 6.7        | 6.7        |
| <b>Current Form Total</b>   | <b>0.0</b> | <b>6.7</b> | <b>6.7</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.0        | 6.7        | 6.7        |
| <b>Final Form Total</b>     | <b>0.0</b> | <b>6.7</b> | <b>6.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 260.00                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 15.00                                |
| Cellulosics                     | 150.00                               |
| Rubber                          | 0.00                                 |
| Plastics                        | 150.00                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-239  | 4.30E-02                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Fuel Manufacturing Facility experiment glovebox waste.

Waste Stream ID: **BT-T001**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                |                       |                 |                                       |            |          |    |
|-------------|--------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Bettis Atomic Power Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5420      | Handling | RH |
| Source Cat. | R&D/R&D Laboratory Waste       | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Irradiated TRU material waste  |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| HIP                       | 0.0        | 0.0        | 0.0        |
| Hot Cell                  | 1.9        | 0.0        | 1.9        |
| <b>Current Form Total</b> | <b>2.0</b> | <b>0.0</b> | <b>2.0</b> |

| Final Form Volumes                          |            |            |            |
|---|------------|------------|------------|
| Container Type                              | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 2.7        | 0.0        | 2.7        |
| <b>Final Form Total</b>                     | <b>2.7</b> | <b>0.0</b> | <b>2.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 200.00                               |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 10.00                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 500.00                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.17E+00                                   |
| Am-243  | 7.30E-03                                   |
| Cm-244  | 1.60E-01                                   |
| Cs-137  | 3.44E+03                                   |
| Np-237  | 1.01E-02                                   |
| Pu-238  | 8.10E+01                                   |
| Pu-239  | 1.41E-01                                   |
| Pu-240  | 1.58E-01                                   |
| Pu-241  | 1.05E+01                                   |
| Pu-242  | 1.12E-03                                   |
| Sr-90   | 3.40E+03                                   |
| Th-229  | 8.73E-03                                   |
| Th-230  | 3.60E-04                                   |
| Th-232  | 8.49E-04                                   |
| U-233   | 3.08E+00                                   |
| U-234   | 4.31E-01                                   |
| U-235   | 2.49E-03                                   |
| U-236   | 2.83E-02                                   |
| U-238   | 1.73E-05                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

## Waste Stream Description

Specimen processing fines, material, and debris.



Waste Stream ID: **BT-T002**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                |                                       |                 |                   |            |          |    |
|-------------|--------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Bettis Atomic Power Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5111      | Handling | CH |
| Source Cat. | Remediation/D&D Waste          | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Contaminated Piping System     | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Piping                    | 18.9        | 0.0        | 18.9        |
| <b>Current Form Total</b> | <b>18.9</b> | <b>0.0</b> | <b>18.9</b> |

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| SWB Dir Ld w/o Liner    | 18.9        | 0.0        | 18.9        |
| <b>Final Form Total</b> | <b>18.9</b> | <b>0.0</b> | <b>18.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 430.00                               |
| Aluminum-based Metals/Alloys    | 35.00                                |
| Other Metals                    | 1.00                                 |
| Other Inorganic Materials       | 1.00                                 |
| Cellulosics                     | 0.50                                 |
| Rubber                          | 7.00                                 |
| Plastics                        | 35.00                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 1.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.00E-04                                   |
| Am-243  | 2.13E-06                                   |
| Cm-244  | 1.17E-04                                   |
| Cs-137  | 1.05E+00                                   |
| Np-237  | 3.03E-06                                   |
| Pu-238  | 4.84E-02                                   |
| Pu-239  | 3.90E-05                                   |
| Pu-240  | 7.97E-05                                   |
| Pu-241  | 7.03E-03                                   |
| Pu-242  | 6.20E-07                                   |
| Pu-244  | 3.56E-14                                   |
| Sr-90   | 1.05E+00                                   |
| Th-229  | 9.65E-15                                   |
| Th-230  | 3.86E-09                                   |
| Th-232  | 6.19E-15                                   |
| U-233   | 5.14E-11                                   |
| U-234   | 1.08E-04                                   |
| U-235   | 1.40E-06                                   |
| U-236   | 1.60E-05                                   |
| U-238   | 6.46E-09                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Piping, pumps, tanks, and other metal items, and debris.

Waste Stream ID: **BT-T007**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                                       |            |          |    |
|-------------|---|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Bettis Atomic Power Laboratory            | Final Waste Form      | Uncategorized Metal | Waste Matrix Code                     | S5111      | Handling | RH |
| Source Cat. | Remediation/D&D Waste                     | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Irradiated TRU material waste and debris. |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| Hot Cell                  | 0.1        | 0.0        | 0.1        |
| <b>Current Form Total</b> | <b>0.1</b> | <b>0.0</b> | <b>0.1</b> |

| Final Form Volumes                          |            |            |            |
|---|------------|------------|------------|
| Container Type                              | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 0.9        | 0.0        | 0.9        |
| <b>Final Form Total</b>                     | <b>0.9</b> | <b>0.0</b> | <b>0.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 501.00                               |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.17E+00                                   |
| Am-243  | 7.30E-03                                   |
| Cm-244  | 1.60E-01                                   |
| Cs-137  | 3.44E+03                                   |
| Np-237  | 1.01E-02                                   |
| Pu-238  | 8.10E+01                                   |
| Pu-239  | 1.41E-01                                   |
| Pu-240  | 1.58E-01                                   |
| Pu-241  | 1.05E+01                                   |
| Pu-242  | 1.12E-03                                   |
| Sr-90   | 3.40E+03                                   |
| Th-229  | 8.73E-03                                   |
| Th-230  | 3.60E-04                                   |
| Th-232  | 8.49E-04                                   |
| U-233   | 3.08E+00                                   |
| U-234   | 4.31E-01                                   |
| U-235   | 2.49E-03                                   |
| U-236   | 2.83E-02                                   |
| U-238   | 1.73E-05                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

317

## Waste Stream Description

Hazardous Metal debris (Lead)

Waste Stream ID: **BN004-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                       |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3150                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| SWB w/ 4 - 55-gal Drums w/ Liners   | WP-BN004          | 211.7        |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-BN004          | 71.9         |
| <b>Shipped Total</b>                |                   | <b>283.5</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.03                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.01                                 |
| Other Inorganic Materials    | 1.95                                 |
| Cellulosics                  | 0.01                                 |
| Rubber                       | 0.01                                 |
| Plastics                     | 2.07                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 475.71                               |
| Organic Matrix               | 1.69                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.74E-01                                   |
| Cm-244  | 5.91E-03                                   |
| Cs-137  | 8.68E-06                                   |
| Np-237  | 5.93E-04                                   |
| Pu-238  | 1.54E-01                                   |
| Pu-239  | 3.76E+00                                   |
| Pu-240  | 8.49E-01                                   |
| Pu-241  | 7.23E+00                                   |
| Pu-242  | 7.23E-05                                   |
| Sr-90   | 1.47E-05                                   |
| Th-229  | 1.61E-07                                   |
| Th-230  | 6.43E-10                                   |
| Th-232  | 2.49E-18                                   |
| U-233   | 8.57E-04                                   |
| U-234   | 3.62E-05                                   |
| U-235   | 8.20E-06                                   |
| U-236   | 5.04E-08                                   |
| U-238   | 5.35E-06                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D011, D029, F001,  
F002, F005, F006,  
F007, F009

## TRUCON Code(s)

111/211

## Waste Stream Description

N/A

Waste Stream ID: **BN161-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                     |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5123                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                   |             |
|-------------------------------------|-------------------|-------------|
| Container Type                      | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner         | WP-BN161          | 0.6         |
| SWB w/ 4 - 55-gal Drums w/ Liners   | WP-BN161          | 3.8         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-BN161          | 57.5        |
| <b>Shipped Total</b>                |                   | <b>61.9</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.39                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.07                                 |
| Other Inorganic Materials    | 127.78                               |
| Cellulosics                  | 10.20                                |
| Rubber                       | 0.00                                 |
| Plastics                     | 2.06                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.78E-01                                   |
| Np-237  | 9.55E-06                                   |
| Pu-238  | 1.59E-01                                   |
| Pu-239  | 3.78E+00                                   |
| Pu-240  | 8.63E-01                                   |
| Pu-241  | 6.24E+00                                   |
| Pu-242  | 6.96E-05                                   |
| Th-229  | 1.92E-15                                   |
| Th-230  | 4.95E-12                                   |
| Th-232  | 6.32E-19                                   |
| U-233   | 4.11E-11                                   |
| U-234   | 7.77E-07                                   |
| U-235   | 4.79E-08                                   |
| U-236   | 2.56E-08                                   |
| U-238   | 1.05E-14                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D029, F001, F002, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **BN211-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                 |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Filter          | Waste Matrix Code | S5410                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner         | WP-BN211          | 7.3          |
| SWB w/ 4 - 55-gal Drums w/ Liners   | WP-BN211          | 54.8         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-BN211          | 483.8        |
| <b>Shipped Total</b>                |                   | <b>545.9</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.28                                 |
| Aluminum-based Metals/Alloys | 1.67                                 |
| Other Metals                 | 0.39                                 |
| Other Inorganic Materials    | 73.61                                |
| Cellulosics                  | 24.37                                |
| Rubber                       | 0.02                                 |
| Plastics                     | 3.81                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.27                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.71E-01                                   |
| Am-243  | 5.09E-10                                   |
| Cs-137  | 2.55E-09                                   |
| Np-237  | 4.63E-05                                   |
| Pu-238  | 1.62E-01                                   |
| Pu-239  | 3.77E+00                                   |
| Pu-240  | 8.72E-01                                   |
| Pu-241  | 6.07E+00                                   |
| Pu-242  | 7.28E-05                                   |
| Sr-90   | 4.33E-09                                   |
| Th-229  | 5.23E-09                                   |
| Th-230  | 4.92E-11                                   |
| Th-232  | 6.39E-19                                   |
| U-233   | 5.57E-05                                   |
| U-234   | 5.70E-06                                   |
| U-235   | 1.15E-06                                   |
| U-236   | 2.59E-08                                   |
| U-238   | 8.43E-09                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D029, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

119/219

## Waste Stream Description

N/A

Waste Stream ID: **BN243-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                     |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5122                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner         | WP-BN243          | 1.5          |
| SWB w/ 4 - 55-gal Drums w/ Liners   | WP-BN243          | 7.6          |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-BN243          | 143.7        |
| <b>Shipped Total</b>                |                   | <b>152.7</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.99                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 4.00                                 |
| Other Inorganic Materials    | 87.65                                |
| Cellulosics                  | 0.08                                 |
| Rubber                       | 0.14                                 |
| Plastics                     | 13.57                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.49E-01                                   |
| Cm-244  | 8.56E-03                                   |
| Cs-137  | 9.28E-10                                   |
| Np-237  | 1.64E-05                                   |
| Pu-238  | 3.49E-02                                   |
| Pu-239  | 7.20E-01                                   |
| Pu-240  | 1.61E-01                                   |
| Pu-241  | 1.23E+00                                   |
| Pu-242  | 1.62E-05                                   |
| Sr-90   | 1.57E-09                                   |
| Th-229  | 3.34E-15                                   |
| Th-230  | 5.38E-11                                   |
| Th-232  | 1.18E-19                                   |
| U-233   | 7.13E-11                                   |
| U-234   | 6.03E-06                                   |
| U-235   | 1.58E-06                                   |
| U-236   | 4.78E-09                                   |
| U-238   | 2.45E-15                                   |

## Haz. Waste No(s).

D005, D008, D009,  
D022, D028, D029,  
F001, F002, F005

## TRUCON Code(s)

118/218, 125/225

## Waste Stream Description

N/A

Waste Stream ID: **BN252-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                 |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5311                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner         | WP-BN252          | 11.9         |
| SWB w/ 4 - 55-gal Drums w/ Liners   | WP-BN252          | 51.0         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-BN252          | 105.4        |
| <b>Shipped Total</b>                |                   | <b>168.3</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.02                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 32.82                                |
| Other Inorganic Materials    | 2.17                                 |
| Cellulosics                  | 0.12                                 |
| Rubber                       | 219.88                               |
| Plastics                     | 1.35                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.02E-01                                   |
| Cs-137  | 2.65E-09                                   |
| Np-237  | 3.63E-04                                   |
| Pu-238  | 2.13E-01                                   |
| Pu-239  | 5.90E+00                                   |
| Pu-240  | 1.27E+00                                   |
| Pu-241  | 1.23E+01                                   |
| Pu-242  | 1.35E-04                                   |
| Sr-90   | 4.22E-09                                   |
| Th-229  | 7.42E-14                                   |
| Th-230  | 2.24E-11                                   |
| Th-232  | 9.28E-19                                   |
| U-233   | 1.58E-09                                   |
| U-234   | 2.79E-06                                   |
| U-235   | 1.13E-06                                   |
| U-236   | 3.76E-08                                   |
| U-238   | 2.04E-14                                   |

## Haz. Waste No(s).

D008, D022, D028, D029, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

121/221, 123/223

## Waste Stream Description

N/A

Waste Stream ID: **BN296-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                          |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|--------------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Lead/Cadmium Metal Waste | Waste Matrix Code | S5112                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related          | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                          |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner         | WP-BN296          | 26.8         |
| SWB w/ 4 - 55-gal Drums w/ Liners   | WP-BN296          | 24.6         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-BN296          | 440.7        |
| <b>Shipped Total</b>                |                   | <b>492.1</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 72.69                                |
| Aluminum-based Metals/Alloys | 0.36                                 |
| Other Metals                 | 97.03                                |
| Other Inorganic Materials    | 2.87                                 |
| Cellulosics                  | 2.69                                 |
| Rubber                       | 0.57                                 |
| Plastics                     | 1.46                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.36E+00                                   |
| Cm-244  | 2.52E-03                                   |
| Cs-137  | 1.88E-08                                   |
| Np-237  | 7.93E-05                                   |
| Pu-238  | 1.68E-01                                   |
| Pu-239  | 3.49E+00                                   |
| Pu-240  | 7.76E-01                                   |
| Pu-241  | 5.52E+00                                   |
| Pu-242  | 7.90E-05                                   |
| Sr-90   | 3.38E-08                                   |
| Th-229  | 1.08E-09                                   |
| Th-230  | 1.95E-11                                   |
| Th-232  | 5.68E-19                                   |
| U-233   | 1.15E-05                                   |
| U-234   | 2.41E-06                                   |
| U-235   | 2.03E-03                                   |
| U-236   | 2.30E-08                                   |
| U-238   | 1.32E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D029, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

117/217, 125/225

## Waste Stream Description

N/A



Waste Stream ID: **BN304-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                 |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5490                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner         | WP-BN304          | 4.4          |
| SWB w/ 4 - 55-gal Drums w/ Liners   | WP-BN304          | 20.8         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-BN304          | 297.0        |
| <b>Shipped Total</b>                |                   | <b>322.1</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 15.85                                |
| Aluminum-based Metals/Alloys | 0.03                                 |
| Other Metals                 | 23.46                                |
| Other Inorganic Materials    | 4.49                                 |
| Cellulosics                  | 4.79                                 |
| Rubber                       | 7.80                                 |
| Plastics                     | 6.19                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.01                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.09                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.66E-01                                   |
| Cs-137  | 1.31E-06                                   |
| Np-237  | 7.43E-06                                   |
| Pu-238  | 4.81E+01                                   |
| Pu-239  | 9.45E-02                                   |
| Pu-240  | 7.12E-02                                   |
| Pu-241  | 8.12E-01                                   |
| Pu-242  | 6.02E-05                                   |
| Sr-90   | 2.67E-06                                   |
| Th-229  | 1.51E-15                                   |
| Th-230  | 6.75E-10                                   |
| Th-232  | 5.22E-20                                   |
| U-233   | 3.23E-11                                   |
| U-234   | 1.43E-04                                   |
| U-235   | 1.34E-07                                   |
| U-236   | 2.11E-09                                   |
| U-238   | 7.40E-05                                   |

## Haz. Waste No(s).

D004, D005, D006,  
D007, D008, D009,  
D010, D011, D022,  
D029, F001, F002,  
F005, F007, F009

## TRUCON Code(s)

119/219, 122/222,  
123/223, 125/225,  
130/230

## Waste Stream Description

N/A

Waste Stream ID: **BN510-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                                       |                 |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes               |                   |               |
|-------------------------------|-------------------|---------------|
| Container Type                | Ref. Waste Stream | Volume        |
| 100-gal Drum Dir Ld w/o Liner | WP-BN510          | 2311.9        |
| <b>Shipped Total</b>          |                   | <b>2311.9</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 310.37                               |
| Aluminum-based Metals/Alloys | 2.69                                 |
| Other Metals                 | 3.65                                 |
| Other Inorganic Materials    | 13.34                                |
| Cellulosics                  | 155.69                               |
| Rubber                       | 4.21                                 |
| Plastics                     | 179.84                               |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.03                                 |
| Organic Matrix               | 0.01                                 |
| Soils/gravel                 | 0.02                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.87E-01                                   |
| Cs-137  | 1.46E-07                                   |
| Np-237  | 1.94E-05                                   |
| Pu-238  | 8.37E-02                                   |
| Pu-239  | 1.20E+00                                   |
| Pu-240  | 2.58E-01                                   |
| Pu-241  | 2.23E+00                                   |
| Pu-242  | 2.19E-05                                   |
| Sr-90   | 2.41E-07                                   |
| U-233   | 5.24E-06                                   |
| U-234   | 4.41E-04                                   |
| U-235   | 4.35E-04                                   |
| U-238   | 9.67E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D029, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **BN835-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                       |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3113                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| SWB w/ 4 - 55-gal Drums w/ Liners   | WP-BN835          | 5.7          |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-BN835          | 953.2        |
| <b>Shipped Total</b>                |                   | <b>958.9</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.02                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 0.75                                 |
| Cellulosics                  | 0.92                                 |
| Rubber                       | 0.01                                 |
| Plastics                     | 0.56                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 216.48                               |
| Organic Matrix               | 0.09                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.44E-02                                   |
| Cs-137  | 8.43E-08                                   |
| Np-237  | 5.03E-06                                   |
| Pu-238  | 1.49E+00                                   |
| Pu-239  | 3.03E-03                                   |
| Pu-240  | 1.92E-03                                   |
| Pu-241  | 3.52E-02                                   |
| Pu-242  | 1.89E-06                                   |
| Sr-90   | 1.47E-07                                   |
| Th-229  | 1.03E-15                                   |
| Th-230  | 1.93E-11                                   |
| Th-232  | 1.41E-21                                   |
| U-233   | 2.19E-11                                   |
| U-234   | 4.26E-06                                   |
| U-235   | 1.42E-10                                   |
| U-236   | 5.70E-11                                   |
| U-238   | 2.23E-07                                   |

## Haz. Waste No(s).

D007, D008, D009,  
F001, F002

## TRUCON Code(s)

111/211

## Waste Stream Description

N/A

Waste Stream ID: **BN836-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                       |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3121                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                   |                   |               |
|-----------------------------------|-------------------|---------------|
| Container Type                    | Ref. Waste Stream | Volume        |
| SWB w/ 4 - 55-gal Drums w/ Liners | WP-BN836          | 1088.6        |
| <b>Shipped Total</b>              |                   | <b>1088.6</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.01                                 |
| Other Inorganic Materials    | 0.08                                 |
| Cellulosics                  | 0.07                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 0.27                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 531.63                               |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.40E-03                                   |
| Cs-137  | 2.60E-07                                   |
| Np-237  | 1.70E-06                                   |
| Pu-238  | 1.45E+00                                   |
| Pu-239  | 2.18E-03                                   |
| Pu-240  | 1.49E-03                                   |
| Pu-241  | 5.04E-03                                   |
| Pu-242  | 1.71E-06                                   |
| Sr-90   | 4.29E-07                                   |
| U-234   | 1.95E-07                                   |
| U-235   | 2.59E-08                                   |
| U-238   | 1.23E-08                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F005

## TRUCON Code(s)

111/211

## Waste Stream Description

N/A

Waste Stream ID: **BNINW216-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                       |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3121                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                   |               |
|-------------------------------------|-------------------|---------------|
| Container Type                      | Ref. Waste Stream | Volume        |
| 55-gal Drum Dir Ld w/ Liner         | WP-BNINW216       | 58.7          |
| SWB w/ 4 - 55-gal Drums w/ Liners   | WP-BNINW216       | 506.5         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-BNINW216       | 3056.0        |
| <b>Shipped Total</b>                |                   | <b>3621.2</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.02                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.06                                 |
| Other Inorganic Materials    | 5.50                                 |
| Cellulosics                  | 0.01                                 |
| Rubber                       | 0.01                                 |
| Plastics                     | 0.55                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 361.64                               |
| Organic Matrix               | 0.34                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.66E+00                                   |
| Cs-137  | 1.28E-08                                   |
| Np-237  | 7.47E-05                                   |
| Pu-238  | 3.30E-02                                   |
| Pu-239  | 3.36E-01                                   |
| Pu-240  | 8.38E-02                                   |
| Pu-241  | 1.03E+00                                   |
| Pu-242  | 4.47E-05                                   |
| Sr-90   | 2.06E-08                                   |
| Th-229  | 1.50E-14                                   |
| Th-230  | 3.46E-10                                   |
| Th-232  | 6.14E-20                                   |
| U-233   | 3.21E-10                                   |
| U-234   | 3.85E-05                                   |
| U-235   | 6.75E-06                                   |
| U-236   | 2.48E-09                                   |
| U-238   | 4.59E-04                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, F001, F002, F003, F005, F006, F007, F009

## TRUCON Code(s)

111/211, 132/232

## Waste Stream Description

N/A

Waste Stream ID: **BNINW218-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                       |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3121                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| SWB w/ 4 - 55-gal Drums w/ Liners   | WP-BNINW218       | 39.7         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-BNINW218       | 435.9        |
| <b>Shipped Total</b>                |                   | <b>475.6</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.03                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 31.78                                |
| Cellulosics                  | 0.01                                 |
| Rubber                       | 0.01                                 |
| Plastics                     | 2.72                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 328.39                               |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.93E-02                                   |
| Cs-137  | 2.19E-08                                   |
| Np-237  | 5.49E-04                                   |
| Pu-238  | 4.83E-03                                   |
| Pu-239  | 9.44E-02                                   |
| Pu-240  | 1.94E-02                                   |
| Pu-241  | 1.96E-01                                   |
| Pu-242  | 2.84E-06                                   |
| Sr-90   | 3.58E-08                                   |
| Th-229  | 4.49E-13                                   |
| Th-230  | 6.33E-10                                   |
| Th-232  | 5.69E-20                                   |
| U-233   | 4.79E-09                                   |
| U-234   | 3.52E-05                                   |
| U-235   | 3.76E-06                                   |
| U-236   | 1.15E-09                                   |
| U-238   | 2.98E-04                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D010, D011,  
D032, F001, F002,  
F005, F006, F007,  
F009

## TRUCON Code(s)

111/211

## Waste Stream Description

N/A

Waste Stream ID: **ID-RF-BNL-ASH-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                       |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3111                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |            |
|------------------------------|-------------------|------------|
| Container Type               | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/o Liner | WP-ID-RF-BNL-ASH  | 0.2        |
| <b>Shipped Total</b>         |                   | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 9.62                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 37.02                                |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 7.69                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.88E-01                                   |
| Np-237  | 8.83E-06                                   |
| Pu-238  | 1.19E-01                                   |
| Pu-239  | 3.52E+00                                   |
| Pu-240  | 8.09E-01                                   |
| Pu-241  | 5.26E+00                                   |
| Pu-242  | 6.47E-05                                   |
| Th-229  | 1.77E-15                                   |
| Th-230  | 1.52E-12                                   |
| Th-232  | 5.92E-19                                   |
| U-233   | 3.80E-11                                   |
| U-234   | 3.38E-07                                   |
| U-235   | 3.47E-09                                   |
| U-236   | 2.40E-08                                   |
| U-238   | 9.76E-15                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F005

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **ID-RF-S3114-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                     |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Solidified Organics | Waste Matrix Code | S3114                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                   |             |
|-------------------------------------|-------------------|-------------|
| Container Type                      | Ref. Waste Stream | Volume      |
| SWB w/ 4 - 55-gal Drums w/ Liners   | WP-ID-RF-S3114    | 18.9        |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-ID-RF-S3114    | 76.6        |
| <b>Shipped Total</b>                |                   | <b>95.5</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.08                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 3.36                                 |
| Other Inorganic Materials    | 3.54                                 |
| Cellulosics                  | 0.02                                 |
| Rubber                       | 1.63                                 |
| Plastics                     | 1.26                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 331.92                               |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.87E-02                                   |
| Cs-137  | 1.52E-08                                   |
| Np-237  | 1.30E-06                                   |
| Pu-238  | 4.85E-03                                   |
| Pu-239  | 1.42E-01                                   |
| Pu-240  | 3.03E-02                                   |
| Pu-241  | 2.90E-01                                   |
| Pu-242  | 2.70E-06                                   |
| Sr-90   | 2.54E-08                                   |
| U-234   | 4.20E-06                                   |
| U-235   | 1.15E-07                                   |
| U-238   | 9.18E-07                                   |

## Haz. Waste No(s).

D022, D026, D027,  
D028, D029, D030,  
D032, D034, D036,  
D037, F001, F002,  
F005

## TRUCON Code(s)

112/212

## Waste Stream Description

N/A



Waste Stream ID: **ID-RF-S3150-A-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                       |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3150                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner         | WP-ID-RF-S3150-A  | 68.4         |
| SWB w/ 4 - 55-gal Drums w/ Liners   | WP-ID-RF-S3150-A  | 83.2         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-ID-RF-S3150-A  | 14.4         |
| <b>Shipped Total</b>                |                   | <b>166.0</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.01                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 25.73                                |
| Other Inorganic Materials    | 4.25                                 |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 2.35                                 |
| Plastics                     | 3.15                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 636.61                               |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.58E-01                                   |
| Cs-137  | 9.08E-08                                   |
| Np-237  | 8.78E-06                                   |
| Pu-238  | 3.59E-02                                   |
| Pu-239  | 7.78E-01                                   |
| Pu-240  | 1.72E-01                                   |
| Pu-241  | 1.71E+00                                   |
| Pu-242  | 1.45E-05                                   |
| Sr-90   | 1.56E-07                                   |
| Th-229  | 1.79E-15                                   |
| Th-230  | 3.05E-08                                   |
| Th-232  | 1.26E-19                                   |
| U-233   | 3.81E-11                                   |
| U-234   | 3.39E-03                                   |
| U-235   | 5.19E-07                                   |
| U-236   | 5.11E-09                                   |
| U-238   | 1.11E-06                                   |

## Haz. Waste No(s).

D022, D028, D029, D030, D032, D034, D036, D043, F001, F002, F005

## TRUCON Code(s)

112/212

## Waste Stream Description

N/A

Waste Stream ID: **ID-RF-S5100-A-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                                       |                 |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5100      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner         | WP-ID-RF-S5100-A  | 122.5        |
| SWB w/ 4 - 55-gal Drums w/ Liners   | WP-ID-RF-S5100-A  | 5.7          |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-ID-RF-S5100-A  | 397.6        |
| <b>Shipped Total</b>                |                   | <b>525.8</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.02                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 113.17                               |
| Cellulosics                  | 14.07                                |
| Rubber                       | 0.01                                 |
| Plastics                     | 8.26                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 1.16                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.09E-01                                   |
| Cs-137  | 1.70E-08                                   |
| Np-237  | 1.07E-06                                   |
| Pu-238  | 1.61E-02                                   |
| Pu-239  | 4.70E-01                                   |
| Pu-240  | 1.08E-01                                   |
| Pu-241  | 7.16E-01                                   |
| Pu-242  | 9.01E-06                                   |
| Sr-90   | 2.87E-08                                   |
| Th-229  | 1.84E-10                                   |
| Th-230  | 1.55E-11                                   |
| Th-232  | 7.88E-20                                   |
| U-233   | 1.96E-06                                   |
| U-234   | 1.75E-06                                   |
| U-235   | 4.44E-08                                   |
| U-236   | 3.19E-09                                   |
| U-238   | 8.56E-09                                   |

## Haz. Waste No(s).

D008, D009, D022,  
F001, F002, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **ID-RF-S5126-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                                       |                 |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5126      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner         | WP-ID-RF-S5126    | 47.0         |
| 55-gal Drum Dir Ld w/o Liner        | WP-ID-RF-S5126    | 0.4          |
| SWB w/ 4 - 55-gal Drums w/ Liners   | WP-ID-RF-S5126    | 5.7          |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-ID-RF-S5126    | 95.8         |
| <b>Shipped Total</b>                |                   | <b>148.9</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.57                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.03                                 |
| Other Inorganic Materials    | 220.35                               |
| Cellulosics                  | 6.52                                 |
| Rubber                       | 0.04                                 |
| Plastics                     | 4.64                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.32E-01                                   |
| Cs-137  | 6.56E-03                                   |
| Np-237  | 1.30E-05                                   |
| Pu-238  | 1.29E-01                                   |
| Pu-239  | 3.49E+00                                   |
| Pu-240  | 8.12E-01                                   |
| Pu-241  | 6.68E+00                                   |
| Pu-242  | 6.65E-05                                   |
| Sr-90   | 9.10E-08                                   |
| Th-229  | 1.35E-07                                   |
| Th-230  | 1.01E-09                                   |
| Th-232  | 5.95E-19                                   |
| U-233   | 1.44E-03                                   |
| U-234   | 1.12E-04                                   |
| U-235   | 8.55E-08                                   |
| U-236   | 2.41E-08                                   |
| U-238   | 1.00E-14                                   |

## Haz. Waste No(s).

D008, D029, F001,  
F002, F005

## TRUCON Code(s)

115/215

## Waste Stream Description

N/A

Waste Stream ID: **ID-RF-S5300-A-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                                       |                 |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5300      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                      |                   |               |
|--------------------------------------|-------------------|---------------|
| Container Type                       | Ref. Waste Stream | Volume        |
| SWB w/ 4 - 55-gal Drums w/ Liners    | WP-ID-RF-S5300-A  | 43.5          |
| SWB w/ 4 - 55-gal Drums w/o Liners   | WP-ID-RF-S5300-A  | 1.9           |
| TDOP w/ 10 - 55-gal Drums w/ Liners  | WP-ID-RF-S5300-A  | 1379.5        |
| TDOP w/ 10 - 55-gal Drums w/o Liners | WP-ID-RF-S5300-A  | 4.8           |
| <b>Shipped Total</b>                 |                   | <b>1429.7</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 3.81                                 |
| Aluminum-based Metals/Alloys | 0.20                                 |
| Other Metals                 | 0.37                                 |
| Other Inorganic Materials    | 6.63                                 |
| Cellulosics                  | 49.18                                |
| Rubber                       | 4.06                                 |
| Plastics                     | 52.32                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.14E-02                                   |
| Am-243  | 1.20E-11                                   |
| Cm-244  | 3.71E-04                                   |
| Cs-137  | 9.10E-09                                   |
| Np-237  | 2.37E-06                                   |
| Pu-238  | 3.67E-03                                   |
| Pu-239  | 1.10E-01                                   |
| Pu-240  | 2.48E-02                                   |
| Pu-241  | 1.23E+00                                   |
| Pu-242  | 2.52E-06                                   |
| Sr-90   | 1.28E-08                                   |
| U-233   | 2.00E-04                                   |
| U-234   | 1.42E-05                                   |
| U-235   | 3.75E-07                                   |
| U-238   | 5.81E-07                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D029, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

116/216

## Waste Stream Description

N/A

Waste Stream ID: **IN-AE-AGHC-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                        | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | RH |
| Source Cat. | R&D/R&D Laboratory Waste                         | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | RH-TRU Debris Waste From ANL-E Stored at the INL |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| 30-gal Drum               | 69.7        | 0.0        | 69.7        |
| <b>Current Form Total</b> | <b>69.7</b> | <b>0.0</b> | <b>69.7</b> |

| Final Form Volumes                          |              |            |              |
|---|--------------|------------|--------------|
| Container Type                              | Stored       | Proj.      | Total        |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 183.3        | 0.0        | 183.3        |
| <b>Final Form Total</b>                     | <b>183.3</b> | <b>0.0</b> | <b>183.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 100.00                               |
| Aluminum-based Metals/Alloys    | 10.27                                |
| Other Metals                    | 15.32                                |
| Other Inorganic Materials       | 10.26                                |
| Cellulosics                     | 13.83                                |
| Rubber                          | 3.46                                 |
| Plastics                        | 29.50                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.46                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.74E-01                                   |
| Cs-137  | 8.43E+00                                   |
| Pu-238  | 2.13E-01                                   |
| Pu-239  | 7.76E-01                                   |
| Pu-240  | 4.08E-01                                   |
| Pu-241  | 6.10E+00                                   |
| Pu-242  | 1.28E-04                                   |
| Sr-90   | 6.24E+00                                   |
| U-233   | 1.38E-03                                   |
| U-234   | 2.51E-03                                   |
| U-235   | 8.87E-05                                   |
| U-238   | 1.49E-05                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D028, D029, F002, F005

## TRUCON Code(s)

322, 325

## Waste Stream Description

N/A

Waste Stream ID: **IN-AW-161**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                    |                       |                 |                                       |            |          |    |
|-------------|------------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory          | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | RH |
| Source Cat. | Other/Multiple Sources             | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Analytical Chemistry Lab Glassware |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.8        | 0.0        | 0.8        |
| <b>Current Form Total</b>   | <b>0.8</b> | <b>0.0</b> | <b>0.8</b> |

| Final Form Volumes                          |            |            |            |
|---|------------|------------|------------|
| Container Type                              | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 1.8        | 0.0        | 1.8        |
| <b>Final Form Total</b>                     | <b>1.8</b> | <b>0.0</b> | <b>1.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1584.00                              |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 515.00                               |
| Cellulosics                     | 240.00                               |
| Rubber                          | 0.00                                 |
| Plastics                        | 191.00                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Cs-137  | 5.55E-01                                   |
| Pu-239  | 2.77E+00                                   |
| Pu-240  | 5.90E-02                                   |
| Sr-90   | 4.05E-01                                   |
| Th-232  | 1.40E-17                                   |
| U-235   | 1.67E-06                                   |
| U-236   | 3.15E-08                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream was generated at Argonne National Laboratory-West at the INEL. These wastes consist of glassware, paper, poly, and miscellaneous hardware generated during analytical chemistry laboratory operations.

Waste Stream ID: **IN-BN004**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory               | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3150                                 | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | Special Setups Waste                    |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 437.2        | 0.0        | 437.2        |
| <b>Current Form Total</b>   | <b>437.2</b> | <b>0.0</b> | <b>437.2</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 437.2        | 0.0        | 437.2        |
| <b>Final Form Total</b>     | <b>437.2</b> | <b>0.0</b> | <b>437.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 5.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1300.00                              |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.25E-01                                   |
| Np-237  | 1.36E-06                                   |
| Pu-238  | 1.00E-02                                   |
| Pu-239  | 3.87E-01                                   |
| Pu-240  | 8.74E-02                                   |
| Pu-241  | 3.44E-01                                   |
| Pu-242  | 6.33E-06                                   |
| Th-229  | 1.26E-13                                   |
| Th-230  | 2.53E-10                                   |
| Th-232  | 1.03E-16                                   |
| U-233   | 1.07E-10                                   |
| U-234   | 1.34E-06                                   |
| U-235   | 1.53E-08                                   |
| U-236   | 1.04E-07                                   |
| U-238   | 3.83E-14                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D011, D029, F001,  
F002, F005, F006,  
F007, F009

## TRUCON Code(s)

111/211

## Waste Stream Description

Consists of waste >50% by volume inorganic solidified waste. Specifically, small quantities of liquids solidified in large quantities of cement. Small quantities of absorbent (Oil-Dri® or vermiculite) were also added.

Waste Stream ID: **IN-BN161**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                     |                   |            |          |    |
|-------------|---|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory               | Final Waste Form                      | Inorganic Non-Metal | Waste Matrix Code | S5123      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Firebrick Debris Waste                  | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 439.3        | 0.0        | 439.3        |
| <b>Current Form Total</b>   | <b>439.3</b> | <b>0.0</b> | <b>439.3</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 439.3        | 0.0        | 439.3        |
| <b>Final Form Total</b>     | <b>439.3</b> | <b>0.0</b> | <b>439.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 540.00                               |
| Cellulosics                     | 28.00                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 7.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.91E-01                                   |
| Np-237  | 1.67E-05                                   |
| Pu-238  | 1.30E-01                                   |
| Pu-239  | 3.78E+00                                   |
| Pu-240  | 8.61E-01                                   |
| Pu-241  | 1.78E+00                                   |
| Pu-242  | 6.96E-05                                   |
| Th-229  | 1.73E-12                                   |
| Th-230  | 1.47E-09                                   |
| Th-232  | 4.61E-16                                   |
| U-233   | 1.51E-09                                   |
| U-234   | 1.14E-05                                   |
| U-235   | 1.45E-07                                   |
| U-236   | 6.90E-07                                   |
| U-238   | 2.84E-13                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D029, F001, F002, F005

## TRUCON Code(s)

122/222, 125/225, 130/230

## Waste Stream Description

Waste that is estimated to contain a minimum of 50% by volume ceramic or brick debris (e.g., firebrick, ceramic refractories). Iron-based Metals/Alloys - Metal waste items of iron, galvanized metal, carbon steel Other Inorganic Materials - Firebrick, cinder blocks, vermiculite, oil-dri Cellulosics - Fibre-paks, cardboard liners, wipes, tape, rags, paper Plastics (waste material) - inner polyethylene bags, poly bottles



Waste Stream ID: **IN-BN211**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory               | Final Waste Form                      | Filter          | Waste Matrix Code | S5410      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Filter Debris Waste                     | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 424.7        | 0.0        | 424.7        |
| <b>Current Form Total</b>   | <b>424.7</b> | <b>0.0</b> | <b>424.7</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 424.7        | 0.0        | 424.7        |
| <b>Final Form Total</b>     | <b>424.7</b> | <b>0.0</b> | <b>424.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 3.00                                 |
| Aluminum-based Metals/Alloys    | 4.00                                 |
| Other Metals                    | 1.00                                 |
| Other Inorganic Materials       | 210.00                               |
| Cellulosics                     | 59.00                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 7.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.76E-01                                   |
| Am-243  | 5.08E-10                                   |
| Cs-137  | 1.40E-09                                   |
| Np-237  | 5.42E-05                                   |
| Pu-238  | 1.32E-01                                   |
| Pu-239  | 3.77E+00                                   |
| Pu-240  | 8.70E-01                                   |
| Pu-241  | 1.74E+00                                   |
| Pu-242  | 7.28E-05                                   |
| Sr-90   | 2.33E-09                                   |
| Th-229  | 1.41E-07                                   |
| Th-230  | 2.69E-09                                   |
| Th-232  | 4.65E-16                                   |
| U-233   | 5.57E-05                                   |
| U-234   | 1.65E-05                                   |
| U-235   | 1.25E-06                                   |
| U-236   | 6.97E-07                                   |
| U-238   | 8.43E-09                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D029, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

119/219

## Waste Stream Description

Consists of debris that is estimated to be 50% by volume, or more, high-efficiency particulate air filters (HEPA) or other filters constructed of more than one material type (e.g., metal, inorganic non-metal, and organic materials). Iron-based Metals/Alloys - Miscellaneous metal debris, filter frames Aluminum-based Metals/Alloys - aluminum foil, Filter media, filter frames Other Metal -lead tape Other Inorganic Materials -Filter media, Portland cement, Oil-Dri®, vermiculite, Cellulosics - Filter media, wooden filter frames, cardboard cartons, fiberboard liners and discs Plastics (waste material) - small poly bags, poly bottles, filters

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-BN-243**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                     |                   |            |          |    |
|-------------|---|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory               | Final Waste Form                      | Inorganic Non-Metal | Waste Matrix Code | S5122      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Glass Debris Waste                      | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 347.4        | 0.0        | 347.4        |
| <b>Current Form Total</b>   | <b>347.4</b> | <b>0.0</b> | <b>347.4</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 347.4        | 0.0        | 347.4        |
| <b>Final Form Total</b>     | <b>347.4</b> | <b>0.0</b> | <b>347.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 2.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 20.00                                |
| Other Inorganic Materials       | 290.00                               |
| Cellulosics                     | 1.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 32.00                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.12E-01                                   |
| Np-237  | 1.18E-06                                   |
| Pu-238  | 1.52E-02                                   |
| Pu-239  | 5.77E-01                                   |
| Pu-240  | 1.28E-01                                   |
| Pu-241  | 3.46E-01                                   |
| Pu-242  | 2.31E-05                                   |
| Th-229  | 1.06E-13                                   |
| Th-230  | 3.83E-10                                   |
| Th-232  | 1.50E-16                                   |
| U-233   | 9.19E-11                                   |
| U-234   | 2.02E-06                                   |
| U-235   | 4.31E-07                                   |
| U-236   | 1.52E-07                                   |
| U-238   | 2.82E-08                                   |

## Haz. Waste No(s).

D005, D008, D009, D022, D028, D029, F001, F002, F005

## TRUCON Code(s)

118/218, 125/225

## Waste Stream Description

Waste that is estimated to contain a minimum of 50% by volume glass debris (e.g., leaded glass windows, bottles, light bulbs) -- WMP Comments -- Iron-based Metals/Alloys - cans, tools, misc. metal items; Other Metal-Leaded glass, lead tape, lead shielding; Other Inorganic Materials - glass, vermiculite, oil-dri; Cellulosics - fibre-paks, cardboard liners; Plastics (waste material) - polyethylene bags.

Waste Stream ID: **IN-BN252**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory                          | Final Waste Form                      | Combustible     | Waste Matrix Code | S5311      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Leaded Rubber Debris Waste                         | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 146.8        | 0.0        | 146.8        |
| <b>Current Form Total</b>   | <b>146.8</b> | <b>0.0</b> | <b>146.8</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 146.8        | 0.0        | 146.8        |
| <b>Final Form Total</b>     | <b>146.8</b> | <b>0.0</b> | <b>146.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 89.00                                |
| Other Inorganic Materials       | 7.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 690.00                               |
| Plastics                        | 3.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.15E+00                                   |
| Cs-137  | 1.49E-09                                   |
| Np-237  | 3.72E-04                                   |
| Pu-238  | 1.75E-01                                   |
| Pu-239  | 5.90E+00                                   |
| Pu-240  | 1.26E+00                                   |
| Pu-241  | 3.69E+00                                   |
| Pu-242  | 1.35E-04                                   |
| Sr-90   | 2.33E-09                                   |
| Th-229  | 5.03E-11                                   |
| Th-230  | 2.24E-09                                   |
| Th-232  | 6.27E-16                                   |
| U-233   | 4.14E-08                                   |
| U-234   | 1.65E-05                                   |
| U-235   | 1.28E-06                                   |
| U-236   | 9.75E-07                                   |
| U-238   | 5.31E-13                                   |

## Haz. Waste No(s).

D008, D022, D028, D029, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

121/221, 123/223

## Waste Stream Description

Waste that is estimated to contain 50% or more by volume leaded rubber debris. Examples of this waste that might be included are leaded gloves and aprons. Other Metal- Leaded gloves and aprons, lead liner; Other Inorganic Materials - vermiculite, oil-dri; Cellulosics - Fiberboard liners, cloth rags, paper; Plastics (waste material) - poly bags, Rubber - Neoprene and Hypalon gloves, rubber sheets and window gaskets.

Waste Stream ID: **IN-BN296**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                     |                   |            |          |    |
|-------------|---|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory               | Final Waste Form                      | Uncategorized Metal | Waste Matrix Code | S5122      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Non-Special Source Metal                | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 925.4        | 0.0        | 925.4        |
| <b>Current Form Total</b>   | <b>925.4</b> | <b>0.0</b> | <b>925.4</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 925.4        | 0.0        | 925.4        |
| <b>Final Form Total</b>     | <b>925.4</b> | <b>0.0</b> | <b>925.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 236.23                               |
| Aluminum-based Metals/Alloys    | 1.50                                 |
| Other Metals                    | 323.15                               |
| Other Inorganic Materials       | 10.48                                |
| Cellulosics                     | 7.30                                 |
| Rubber                          | 2.60                                 |
| Plastics                        | 5.48                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.44E+00                                   |
| Cm-244  | 9.68E-04                                   |
| Cs-137  | 1.05E-08                                   |
| Np-237  | 9.08E-05                                   |
| Pu-238  | 1.38E-01                                   |
| Pu-239  | 3.49E+00                                   |
| Pu-240  | 7.74E-01                                   |
| Pu-241  | 1.66E+00                                   |
| Pu-242  | 7.90E-05                                   |
| Sr-90   | 1.86E-08                                   |
| Th-229  | 2.79E-08                                   |
| Th-230  | 1.82E-09                                   |
| Th-232  | 3.84E-16                                   |
| U-233   | 1.15E-05                                   |
| U-234   | 1.32E-05                                   |
| U-235   | 2.03E-03                                   |
| U-236   | 5.98E-07                                   |
| U-238   | 1.32E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D029, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

117/217, 125/225

## Waste Stream Description

Waste that is estimated to contain a minimum 50% by volume metal debris and the waste stream contains bulk, separable, or bonded lead as part of the matrix.

Metal waste items of iron, stainless, galvanized metal, carbon steel Aluminum-based Metals/Alloy - Aluminum waste items Other Metal - Copper, brass, bronze, lead, tantalum, platinum Other Inorganic Materials - glassware, raschig rings, vermiculite, oil-dri Cellulosics - Fibre-Paks, Cardboard liners, wipes, tape Plastics (waste material) - poly bags, poly bottles Rubber - Rubber gloves and aprons

Iron-based Metals/Alloys -

Waste Stream ID: **IN-BN304**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                                       |                 |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | Remediation/D&D Waste     | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Mound Debris Waste        | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 222.6        | 0.0        | 222.6        |
| <b>Current Form Total</b>   | <b>222.6</b> | <b>0.0</b> | <b>222.6</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 222.6        | 0.0        | 222.6        |
| <b>Final Form Total</b>     | <b>222.6</b> | <b>0.0</b> | <b>222.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 77.00                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 95.00                                |
| Other Inorganic Materials       | 40.00                                |
| Cellulosics                     | 15.00                                |
| Rubber                          | 23.00                                |
| Plastics                        | 23.00                                |
| Cements                         | 1.31                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.78E-01                                   |
| Cs-137  | 7.37E-07                                   |
| Np-237  | 8.83E-06                                   |
| Pu-238  | 3.95E+01                                   |
| Pu-239  | 9.44E-02                                   |
| Pu-240  | 7.10E-02                                   |
| Pu-241  | 2.44E-01                                   |
| Pu-242  | 6.02E-05                                   |
| Sr-90   | 1.47E-06                                   |
| Th-229  | 1.08E-12                                   |
| Th-230  | 3.92E-07                                   |
| Th-232  | 3.52E-17                                   |
| U-233   | 9.14E-10                                   |
| U-234   | 3.24E-03                                   |
| U-235   | 1.36E-07                                   |
| U-236   | 5.48E-08                                   |
| U-238   | 7.40E-05                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D029, F001, F002, F005, F007, F009

## TRUCON Code(s)

122/222, 125/225, 130/230

## Waste Stream Description

Waste that is estimated to contain at least 50% by volume debris materials. WMPs - Iron-based Metals/Alloys - stainless steel and carbon steel valves, piping, tools, tubing, hot plates, small tanks, motors, pumps, presses, grinders, and sheet metal Other Metal - Lead bricks Other Inorganic Materials - laboratory glassware, cement, plaster, brick, floor tile, graphite crucibles, Florco, and concrete Cellulosics - Fibre-Paks, Cloth rags, Kimwipes, towels, cartons, coveralls, booties, limited amounts of wood, and cardboard tubes. Rubber - Neoprene and Hypalon gloves and o-rings. Plastics (waste material) - PVC, polyethylene, tygon tubing, bottles, sample vials, gaskets, manipulator boots, small quantities of spent ion-exchange resin, small plastic tanks, Plexiglas shielding and windows.

Waste Stream ID: **IN-BN-510**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                             |                       |                 |                                       |            |          |    |
|-------------|-----------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory   | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5490      | Handling | CH |
| Source Cat. | Other/Multiple Sources      | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SUPERCOMPACTED DEBRIS WASTE |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |                |            |                |
|-----------------------------|----------------|------------|----------------|
| Container Type              | Stored         | Proj.      | Total          |
| 55-gal Drum Dir Ld w/ Liner | 12016.2        | 0.0        | 12016.2        |
| Bin - Misc                  | 1802.5         | 0.0        | 1802.5         |
| Box - Misc                  | 32644.7        | 0.0        | 32644.7        |
| <b>Current Form Total</b>   | <b>46463.3</b> | <b>0.0</b> | <b>46463.3</b> |

| Final Form Volumes            |                |            |                |
|-------------------------------|----------------|------------|----------------|
| Container Type                | Stored         | Proj.      | Total          |
| 100-gal Drum Dir Ld w/o Liner | 11650.5        | 0.0        | 11650.5        |
| <b>Final Form Total</b>       | <b>11650.5</b> | <b>0.0</b> | <b>11650.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1000.00                              |
| Aluminum-based Metals/Alloys    | 9.00                                 |
| Other Metals                    | 13.00                                |
| Other Inorganic Materials       | 45.00                                |
| Cellulosics                     | 520.00                               |
| Rubber                          | 15.00                                |
| Plastics                        | 610.00                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 113.70                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.03E-01                                   |
| Am-243  | 3.05E-07                                   |
| Np-237  | 1.12E-05                                   |
| Pu-238  | 2.70E+00                                   |
| Pu-239  | 1.48E+00                                   |
| Pu-240  | 3.62E-01                                   |
| Pu-241  | 4.06E+00                                   |
| Pu-242  | 2.89E-05                                   |
| Th-229  | 5.87E-05                                   |
| Th-230  | 8.40E-09                                   |
| Th-232  | 1.23E-04                                   |
| U-233   | 4.18E-02                                   |
| U-234   | 1.22E-04                                   |
| U-235   | 4.22E-05                                   |
| U-236   | 1.61E-07                                   |
| U-238   | 1.08E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D029, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

121/221

## Waste Stream Description

Super-compacted waste: Iron-based Metals/Alloys - Metal hinges, pieces of angle iron, miscellaneous metal debris: electrical conduit, piping, flanges, valves, tools, equipment, drums Aluminum-based Metals/Alloy - miscellaneous aluminum debris; aluminum silicate-based ceramic crucibles Other Metal - Lead shielding, structure metal, misc. lead containing items (lead tape, leaded rubber gloves and aprons, lead bricks), stainless steel cans, tools, electronic instrumentation, office equipment batteries, thermometers, gauges, solder beryllium scrap Other Inorganic Materials - glass, raschig rings, absorbent materials (vermiculite, oil-dri, Florco) filter media, asbestos gloves; HEPA filters, drybox filters, insulation, cement, concrete, cinderblock, firebrick, graphite, crucibles Cellulosics - Benelex coated fire-retardant paint, paper, wood, wipes, towels, rags, filter paper, shoe covers, coveralls, booties, Fibre-Paks, cardboard liners, tape Rubber - Surgical gloves, rubber gaskets, leaded gloves and aprons, rubber and latex gloves, air hoses, glovebox gloves Plastics (waste material) - Plexiglas glovebox windows, polypropylene, polyethylene bags, polyvinyl chloride, Teflon, Hypalon, Tygon, bags, sheeting, polyethylene bottles, plastic suits, Ful-Flo incinerator filters, fibrous polypropylene filters, 90-mil liners

Waste Stream ID: **IN-BN835**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory               | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3113                                 | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | Solidified Acid/Caustic Waste           |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 536.0        | 0.0        | 536.0        |
| <b>Current Form Total</b>   | <b>536.0</b> | <b>0.0</b> | <b>536.0</b> |

| Final Form Volumes                 |               |            |               |
|------------------------------------|---------------|------------|---------------|
| Container Type                     | Stored        | Proj.      | Total         |
| SWB w/ 4 - 55-gal Drums w/o Liners | 1219.1        | 0.0        | 1219.1        |
| <b>Final Form Total</b>            | <b>1219.1</b> | <b>0.0</b> | <b>1219.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 19.00                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 710.00                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 211.10                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.66E-05                                   |
| Np-237  | 1.38E-10                                   |
| Pu-238  | 5.32E+00                                   |
| Pu-239  | 3.06E-03                                   |
| Pu-240  | 3.12E-03                                   |
| Pu-241  | 9.32E-05                                   |
| Pu-242  | 5.20E-09                                   |
| Th-229  | 8.81E-18                                   |
| Th-230  | 1.28E-07                                   |
| Th-232  | 3.49E-18                                   |
| U-233   | 8.90E-15                                   |
| U-234   | 6.93E-04                                   |
| U-235   | 1.18E-10                                   |
| U-236   | 3.62E-09                                   |
| U-238   | 3.06E-17                                   |

## Haz. Waste No(s).

D007, D008, D009,  
F001, F002

## TRUCON Code(s)

111/211

## Waste Stream Description

Consists of waste that is primarily inorganic particulate absorbent materials >50% by volume sludge, including absorbed aqueous liquids, if present. Typical examples of inorganic particulate materials are clay (Florco), vermiculite, and diatomaceous earth. - WMP - Cellulosics- plywood spacers, Plastics (waste material) -bottles Inorganic Matrix -Absorbed liquid waste

Waste Stream ID: **IN-BN836**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory                    | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3121      | Handling | CH |
| Source Cat. | Pollution Control or Waste Treatment Process | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Cemented Sludge                              | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 899.2        | 0.0        | 899.2        |
| <b>Current Form Total</b>   | <b>899.2</b> | <b>0.0</b> | <b>899.2</b> |

| Final Form Volumes                |               |            |               |
|-----------------------------------|---------------|------------|---------------|
| Container Type                    | Stored        | Proj.      | Total         |
| SWB w/ 4 - 55-gal Drums w/ Liners | 2043.1        | 0.0        | 2043.1        |
| <b>Final Form Total</b>           | <b>2043.1</b> | <b>0.0</b> | <b>2043.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 1.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1400.00                              |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 211.10                               |
| Packaging Material, Plastic     | 16.30                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.86E-05                                   |
| Np-237  | 5.72E-10                                   |
| Pu-238  | 2.26E+00                                   |
| Pu-239  | 5.33E-05                                   |
| Pu-240  | 2.76E-05                                   |
| Pu-241  | 3.86E-04                                   |
| Pu-242  | 2.42E-08                                   |
| Th-229  | 3.65E-17                                   |
| Th-230  | 5.41E-08                                   |
| Th-232  | 3.09E-20                                   |
| U-233   | 3.69E-14                                   |
| U-234   | 2.93E-04                                   |
| U-235   | 2.05E-12                                   |
| U-236   | 3.20E-11                                   |
| U-238   | 1.42E-16                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F005

## TRUCON Code(s)

111/211

## Waste Stream Description

Consists of &gt;50% by volume sludge from a wastewater treatment process that was solidified with cement. Waste Material Parameters - Other Inorganic Materials - Portland cements, Florco; Inorganic Matrix - Cemented sludge



Waste Stream ID: **IN-BNINW216**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory                    | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3100      | Handling | CH |
| Source Cat. | Pollution Control or Waste Treatment Process | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | First/Second Stage Sludge                    | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |               |            |               |
|-----------------------------|---------------|------------|---------------|
| Container Type              | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner | 4431.2        | 0.0        | 4431.2        |
| <b>Current Form Total</b>   | <b>4431.2</b> | <b>0.0</b> | <b>4431.2</b> |

| Final Form Volumes          |               |            |               |
|-----------------------------|---------------|------------|---------------|
| Container Type              | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner | 4431.2        | 0.0        | 4431.2        |
| <b>Final Form Total</b>     | <b>4431.2</b> | <b>0.0</b> | <b>4431.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 4.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 14.00                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.00                                 |
| Cements                         | 1100.00                              |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.21E+00                                   |
| Np-237  | 5.62E-05                                   |
| Pu-238  | 5.07E-03                                   |
| Pu-239  | 1.98E-01                                   |
| Pu-240  | 4.49E-02                                   |
| Pu-241  | 1.75E-01                                   |
| Pu-242  | 3.23E-06                                   |
| Th-229  | 6.17E-12                                   |
| Th-230  | 1.28E-10                                   |
| Th-232  | 5.26E-17                                   |
| U-233   | 4.92E-09                                   |
| U-234   | 6.78E-07                                   |
| U-235   | 7.80E-09                                   |
| U-236   | 5.33E-08                                   |
| U-238   | 1.95E-14                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, F001, F002, F003, F005, F006, F007, F009

## TRUCON Code(s)

111/211

## Waste Stream Description

IDC ID-RF-001, IDC ID-RF-002 - Consists of >50% by volume secondary sludge or filter cake from wastewater treatment processes or heavy metal sludges from recovery processes. IDC ID-RF-800 - Consists of >50% by volume solidified forms. S3121, Waste Water Treatment Sludge (IDC ID-RF-001, IDC ID-RF-002) S3150, Solidified Homogeneous Solids (IDC ID-RF-800) Two waste matrix codes have been assigned to this waste stream because the immobilization process for this waste stream was changed in 1986. Prior to 1986 the first/second stage sludge was placed into a drum with Portland cement. The excess liquid was immobilized but a solid monolith was not formed. Subsequent to 1986 the sludge was co-fed into a drum with a diatomite and Portland cement mixture, which formed a solid monolith after curing.

Waste Stream ID: **IN-BNINW218**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                       |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory               | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3100      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Building 374 Sludge                     | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 416.0        | 0.0        | 416.0        |
| <b>Current Form Total</b>   | <b>416.0</b> | <b>0.0</b> | <b>416.0</b> |

| Final Form Volumes                |              |            |              |
|-----------------------------------|--------------|------------|--------------|
| Container Type                    | Stored       | Proj.      | Total        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 945.0        | 0.0        | 945.0        |
| <b>Final Form Total</b>           | <b>945.0</b> | <b>0.0</b> | <b>945.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 5.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 69.00                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 7.00                                 |
| Cements                         | 1100.00                              |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 211.10                               |
| Packaging Material, Plastic     | 16.30                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.76E-01                                   |
| Np-237  | 1.97E-06                                   |
| Pu-238  | 9.83E-04                                   |
| Pu-239  | 3.63E-02                                   |
| Pu-240  | 8.21E-03                                   |
| Pu-241  | 4.26E-02                                   |
| Pu-242  | 5.92E-07                                   |
| Th-229  | 1.55E-13                                   |
| Th-230  | 1.74E-11                                   |
| Th-232  | 6.96E-18                                   |
| U-233   | 1.46E-10                                   |
| U-234   | 1.09E-07                                   |
| U-235   | 1.22E-09                                   |
| U-236   | 8.29E-09                                   |
| U-238   | 3.04E-15                                   |

## Haz. Waste No(s).

D006, D007, D008, D009, D010, D011, D032, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

111/211

## Waste Stream Description

WMC S3121 (IDC RF-007, IDC RF-807) - Consists of >50% by volume secondary sludge or filter cake from wastewater treatment processes or heavy metal sludges from recovery processes. WMC S3150 (IDC RF-803) - Consists of >50% by volume solidified forms. Two waste matrix codes have been assigned to this waste stream because the cementation immobilization process for this waste stream was changed in the 1986-1987 timeframe. The immobilization process at other times involved mixing the sludge with Portland cement or a Portland cement and diatomite mixture. The feed streams to the process did not change over time. Iron Based Metal - Lead-containing items, Other Inorganics Materials - Portland cement, diatomite, oil-dri, or vermiculite, Plastic waste - misc. plastic debris, inorganic matrix - solidified Inorganics

Waste Stream ID: **IN-GEM-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                          | Final Waste Form      | Soils           | Waste Matrix Code                     | S4000      | Handling | CH |
| Source Cat. | Remediation/D&D Waste                              | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Glovebox Excavator Method Project Soils and Sludge |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 7.3        | 0.0        | 7.3        |
| <b>Current Form Total</b>   | <b>7.3</b> | <b>0.0</b> | <b>7.3</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 7.3        | 0.0        | 7.3        |
| <b>Final Form Total</b>     | <b>7.3</b> | <b>0.0</b> | <b>7.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.50                                 |
| Other Inorganic Materials       | 59.40                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 116.58                               |
| Inorganic Matrix                | 97.88                                |
| Organic Matrix                  | 224.00                               |
| Soils/gravel                    | 947.70                               |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.49E-01                                   |
| Np-237  | 4.37E-07                                   |
| Pu-238  | 4.77E-03                                   |
| Pu-239  | 2.18E-01                                   |
| Pu-240  | 5.00E-02                                   |
| Pu-241  | 2.34E-01                                   |
| Pu-242  | 2.57E-06                                   |
| Th-229  | 2.68E-16                                   |
| Th-230  | 5.56E-13                                   |
| Th-232  | 3.29E-19                                   |
| U-233   | 2.86E-12                                   |
| U-234   | 4.10E-08                                   |
| U-235   | 6.45E-10                                   |
| U-236   | 4.45E-09                                   |
| U-238   | 1.16E-15                                   |

## Haz. Waste No(s).

D018, D019, D028, D039, D040, D043, F001, F002, F005, F006, F007, F009

**No TRUCON Codes Provided**

## Waste Stream Description

Waste consists of soils (approximately 60%) and associated sludge type wastes to be generated through environmental restoration activities at the Idaho National Engineering Laboratory's Subsurface Disposal Area (Pit 9). The sludge waste originated at the Rocky Flats Plant from various treatment processes in building 774. Sludge wastes included in the waste stream correspond to the following ID numbers: IN-W216, First Stage Sludge; IN-W228, Second Stage Sludge; IN-W309, Organic Setups Oil Solids; IN-W157, Special Setups (Cement); IN-W315, Evaporator Salts; IN-W276, Graphite. Graphite waste generated at the Rocky Flats Plant for casting plutonium metal is also included in the overall waste stream. The originally disposed sludges, graphite and surrounding soils are packaged in a single waste stream through environmental restoration retrieval and repackaging activities.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-GEM-02**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                               | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Remediation/D&D Waste                                   | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Glovebox Excavator Method Project Heterogeneous Debris. |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 5.4        | 0.0        | 5.4        |
| <b>Current Form Total</b>   | <b>5.4</b> | <b>0.0</b> | <b>5.4</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 5.4        | 0.0        | 5.4        |
| <b>Final Form Total</b>     | <b>5.4</b> | <b>0.0</b> | <b>5.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 17.30                                |
| Aluminum-based Metals/Alloys    | 1.13                                 |
| Other Metals                    | 58.00                                |
| Other Inorganic Materials       | 13.56                                |
| Cellulosics                     | 41.00                                |
| Rubber                          | 17.43                                |
| Plastics                        | 63.27                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.49E-01                                   |
| Np-237  | 4.37E-07                                   |
| Pu-238  | 4.77E-03                                   |
| Pu-239  | 2.18E-01                                   |
| Pu-240  | 5.00E-02                                   |
| Pu-241  | 2.34E-01                                   |
| Pu-242  | 2.57E-06                                   |
| Th-229  | 2.68E-16                                   |
| Th-230  | 5.56E-13                                   |
| Th-232  | 3.29E-19                                   |
| U-233   | 2.86E-12                                   |
| U-234   | 4.10E-08                                   |
| U-235   | 6.45E-10                                   |
| U-236   | 4.45E-09                                   |
| U-238   | 1.16E-15                                   |

## Haz. Waste No(s).

D018, D019, D028, D039, D040, D043, F001, F002, F005, F006, F007, F009

**No TRUCON Codes Provided**

## Waste Stream Description

Waste consists of combustible and noncombustible heterogeneous debris generated through environmental restoration activities at the INEEL Subsurface disposal area (Pit 9). The debris includes drum remnants of sludge waste packaging material that originated at the Rocky Flats Plant from various treatment processes in building 774. Original packaging material (if still present) are segregated during retrieval operations and combined with noncombustible and combustible debris streams that originated at the Rocky Flats Plant. The original noncombustible and combustible debris streams are similar to the following ID numbers: IN-W169, dry Paper and Rags; IN-W278, Low Specific Activity Metal, Glass Etc.; and IN-W296, Non special Source Metal. The materials are combined in a single waste stream through environmental restoration retrieval repackaging activities.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-ID-RF-S3114**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                     |                   |            |          |    |
|-------------|--|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory                          | Final Waste Form                      | Solidified Organics | Waste Matrix Code | S3114      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Organic Setups                                     | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |               |            |               |
|-----------------------------|---------------|------------|---------------|
| Container Type              | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner | 1699.2        | 0.0        | 1699.2        |
| <b>Current Form Total</b>   | <b>1699.2</b> | <b>0.0</b> | <b>1699.2</b> |

| Final Form Volumes      |               |            |               |
|-------------------------|---------------|------------|---------------|
| Container Type          | Stored        | Proj.      | Total         |
| SWB Dir Ld w/ Liner     | 3608.0        | 0.0        | 3608.0        |
| <b>Final Form Total</b> | <b>3608.0</b> | <b>0.0</b> | <b>3608.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 152.32                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 9.12                                 |
| Other Inorganic Materials       | 9.62                                 |
| Cellulosics                     | 0.06                                 |
| Rubber                          | 4.41                                 |
| Plastics                        | 45.56                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 900.52                               |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 1.20                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.70E-01                                   |
| Cs-137  | 2.60E-08                                   |
| Np-237  | 4.60E-06                                   |
| Pu-238  | 1.12E-02                                   |
| Pu-239  | 3.86E-01                                   |
| Pu-240  | 8.20E-02                                   |
| Pu-241  | 3.00E-01                                   |
| Pu-242  | 7.32E-06                                   |
| Sr-90   | 4.28E-08                                   |
| Th-229  | 3.15E-13                                   |
| Th-230  | 2.12E-09                                   |
| Th-232  | 2.41E-17                                   |
| U-233   | 3.51E-10                                   |
| U-234   | 1.21E-05                                   |
| U-235   | 3.20E-07                                   |
| U-236   | 4.87E-08                                   |
| U-238   | 2.49E-06                                   |

## Haz. Waste No(s).

D022, D026, D027,  
D028, D029, D030,  
D032, D034, D036,  
D037, F001, F002,  
F005

## TRUCON Code(s)

112/212

## Waste Stream Description

This waste consists of > 50% by volume solidified organic liquids

Waste Stream ID: **IN-ID-RF-S3150-A**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                     |                   |            |          |    |
|-------------|--|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory                          | Final Waste Form                      | Solidified Organics | Waste Matrix Code | S3114      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Organic and Sludge Immobilization System Waste     | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 178.9        | 0.0        | 178.9        |
| <b>Current Form Total</b>   | <b>178.9</b> | <b>0.0</b> | <b>178.9</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 178.9        | 0.0        | 178.9        |
| <b>Final Form Total</b>     | <b>178.9</b> | <b>0.0</b> | <b>178.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 151.00                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 119.00                               |
| Other Inorganic Materials       | 19.60                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 10.90                                |
| Plastics                        | 56.40                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 2940.00                              |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.31E-01                                   |
| Cs-137  | 3.18E-07                                   |
| Np-237  | 4.36E-05                                   |
| Pu-238  | 1.51E-02                                   |
| Pu-239  | 3.59E+00                                   |
| Pu-240  | 7.95E-01                                   |
| Pu-241  | 4.43E+00                                   |
| Pu-242  | 6.68E-05                                   |
| Sr-90   | 5.40E-07                                   |
| Th-229  | 1.42E-12                                   |
| Th-230  | 1.84E-06                                   |
| Th-232  | 9.84E-17                                   |
| U-233   | 2.36E-09                                   |
| U-234   | 1.57E-02                                   |
| U-235   | 2.44E-06                                   |
| U-236   | 3.07E-07                                   |
| U-238   | 5.13E-06                                   |

## Haz. Waste No(s).

D022, D028, D029, D030, D032, D034, D036, D043, F001, F002, F005

## TRUCON Code(s)

112/212

## Waste Stream Description

This waste consists of &gt;50% by volume cemented organic liquids

Waste Stream ID: **IN-ID-RF-S5100-A**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                     |                   |            |          |    |
|-------------|--|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory                          | Final Waste Form                      | Inorganic Non-Metal | Waste Matrix Code | S5100      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Raschig Rings                                      | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 520.0        | 0.0        | 520.0        |
| <b>Current Form Total</b>   | <b>520.0</b> | <b>0.0</b> | <b>520.0</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 147.00                               |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 27.50                                |
| Other Inorganic Materials    | 383.00                               |
| Cellulosics                  | 47.60                                |
| Rubber                       | 0.04                                 |
| Plastics                     | 68.40                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 3.92                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.11E-01                                   |
| Cs-137  | 3.22E-08                                   |
| Np-237  | 6.83E-06                                   |
| Pu-238  | 4.45E-02                                   |
| Pu-239  | 1.59E+00                                   |
| Pu-240  | 3.63E-01                                   |
| Pu-241  | 7.26E-01                                   |
| Pu-242  | 3.05E-05                                   |
| Sr-90   | 5.36E-08                                   |
| Th-229  | 1.62E-08                                   |
| Th-230  | 1.79E-09                                   |
| Th-232  | 1.80E-16                                   |
| U-233   | 6.65E-06                                   |
| U-234   | 9.40E-06                                   |
| U-235   | 1.89E-07                                   |
| U-236   | 2.80E-07                                   |
| U-238   | 2.89E-07                                   |

## Haz. Waste No(s).

D008, D009, D022,  
F001, F002, F005

## TRUCON Code(s)

118/218, 125/225

## Waste Stream Description

This waste consists of &gt;50% by volume Raschig Rings

Waste Stream ID: **IN-ID-RF-S5126-A**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory               | Final Waste Form                      | Graphite        | Waste Matrix Code | S5126      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Graphite Debris                         | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 291.2        | 0.0        | 291.2        |
| <b>Current Form Total</b>   | <b>291.2</b> | <b>0.0</b> | <b>291.2</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 291.2        | 0.0        | 291.2        |
| <b>Final Form Total</b>     | <b>291.2</b> | <b>0.0</b> | <b>291.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 283.00                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.02                                 |
| Other Inorganic Materials       | 1580.00                              |
| Cellulosics                     | 46.80                                |
| Rubber                          | 0.03                                 |
| Plastics                        | 110.00                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.45E+00                                   |
| Cs-137  | 2.64E-02                                   |
| Np-237  | 1.34E-04                                   |
| Pu-238  | 7.62E-01                                   |
| Pu-239  | 2.50E+01                                   |
| Pu-240  | 5.81E+00                                   |
| Pu-241  | 1.44E+01                                   |
| Pu-242  | 4.77E-04                                   |
| Sr-90   | 3.60E-07                                   |
| Th-229  | 2.51E-05                                   |
| Th-230  | 1.95E-07                                   |
| Th-232  | 2.88E-15                                   |
| U-233   | 1.03E-02                                   |
| U-234   | 8.65E-04                                   |
| U-235   | 1.23E-06                                   |
| U-236   | 4.49E-06                                   |
| U-238   | 1.87E-12                                   |

## Haz. Waste No(s).

D008, D029, F001,  
F002, F005

## TRUCON Code(s)

115/215

## Waste Stream Description

Graphite wastes contain more than 50% (by volume) or more, inorganic nonmetal debris.



Waste Stream ID: **IN-ID-RF-S5300-A**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory               | Final Waste Form                      | Combustible     | Waste Matrix Code | S5300      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Combustibles and Plastics               | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |               |            |               |
|-----------------------------|---------------|------------|---------------|
| Container Type              | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner | 5408.0        | 0.0        | 5408.0        |
| <b>Current Form Total</b>   | <b>5408.0</b> | <b>0.0</b> | <b>5408.0</b> |

| Final Form Volumes                |                |            |                |
|-----------------------------------|----------------|------------|----------------|
| Container Type                    | Stored         | Proj.      | Total          |
| SWB w/ 4 - 55-gal Drums w/ Liners | 12285.0        | 0.0        | 12285.0        |
| <b>Final Form Total</b>           | <b>12285.0</b> | <b>0.0</b> | <b>12285.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 146.35                               |
| Aluminum-based Metals/Alloys    | 0.49                                 |
| Other Metals                    | 0.88                                 |
| Other Inorganic Materials       | 16.03                                |
| Cellulosics                     | 118.99                               |
| Rubber                          | 9.82                                 |
| Plastics                        | 145.49                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 211.10                               |
| Packaging Material, Plastic     | 16.30                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.45E-02                                   |
| Am-243  | 1.20E-11                                   |
| Cm-244  | 1.79E-04                                   |
| Cs-137  | 5.87E-09                                   |
| Np-237  | 2.65E-06                                   |
| Pu-238  | 3.16E-03                                   |
| Pu-239  | 1.10E-01                                   |
| Pu-240  | 2.47E-02                                   |
| Pu-241  | 4.91E-01                                   |
| Pu-242  | 2.52E-06                                   |
| Sr-90   | 8.14E-09                                   |
| Th-229  | 3.56E-07                                   |
| Th-230  | 2.44E-09                                   |
| Th-232  | 6.55E-18                                   |
| U-233   | 2.00E-04                                   |
| U-234   | 1.44E-05                                   |
| U-235   | 3.77E-07                                   |
| U-236   | 1.40E-08                                   |
| U-238   | 5.81E-07                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D029, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

112/212, 116/216

## Waste Stream Description

Contains more than 50% (by volume), inorganic combustible and plastic debris

Waste Stream ID: **IN-ID-SDA-Debris**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Remediation/D&D Waste                         | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | ICP Retrieved Debris Waste (Filters/Graphite) |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |               |            |               |
|-----------------------------|---------------|------------|---------------|
| Container Type              | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner | 5541.3        | 0.0        | 5541.3        |
| <b>Current Form Total</b>   | <b>5541.3</b> | <b>0.0</b> | <b>5541.3</b> |

| Final Form Volumes          |               |            |               |
|-----------------------------|---------------|------------|---------------|
| Container Type              | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner | 5541.3        | 0.0        | 5541.3        |
| <b>Final Form Total</b>     | <b>5541.3</b> | <b>0.0</b> | <b>5541.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 152.00                               |
| Cellulosics                     | 231.00                               |
| Rubber                          | 0.00                                 |
| Plastics                        | 13.90                                |
| Cements                         | 0.10                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.10E+00                                   |
| Am-243  | 2.39E-03                                   |
| Np-237  | 8.45E-05                                   |
| Pu-238  | 2.30E-01                                   |
| Pu-239  | 1.16E+00                                   |
| Pu-240  | 3.05E-01                                   |
| Th-229  | 9.14E-08                                   |
| Th-230  | 3.96E-07                                   |
| Th-232  | 9.15E-14                                   |
| U-233   | 2.71E-05                                   |
| U-234   | 1.24E-03                                   |
| U-235   | 9.93E-05                                   |
| U-236   | 5.16E-05                                   |
| U-238   | 2.10E-03                                   |

## Haz. Waste No(s).

D004, D005, D006,  
D007, D008, D009,  
D010, D011, D022,  
D027, D028, D029,  
D030, D032, D033,  
D034, D037, D038,  
D043, F001, F002,  
F004, F005, F006,  
F007, F009

## TRUCON Code(s)

112/212, 122/222,  
127/227

## Waste Stream Description

Pre-1970 buried waste retrieved for the Idaho Completion Project

Waste Stream ID: **IN-ID-SDA-Sludge**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                                       |            |          |    |
|-------------|---|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory   | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3900      | Handling | CH |
| Source Cat. | Remediation/D&D Waste   | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | ICP Retrieved Sludge Waste (Inorganic/Organic Sludge/Roaster Oxide) |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |                |            |                |
|-----------------------------|----------------|------------|----------------|
| Container Type              | Stored         | Proj.      | Total          |
| 55-gal Drum Dir Ld w/ Liner | 11811.3        | 0.0        | 11811.3        |
| <b>Current Form Total</b>   | <b>11811.3</b> | <b>0.0</b> | <b>11811.3</b> |

| Final Form Volumes          |                |            |                |
|-----------------------------|----------------|------------|----------------|
| Container Type              | Stored         | Proj.      | Total          |
| 55-gal Drum Dir Ld w/ Liner | 11811.3        | 0.0        | 11811.3        |
| <b>Final Form Total</b>     | <b>11811.3</b> | <b>0.0</b> | <b>11811.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 7.00                                 |
| Cements                         | 0.68                                 |
| Inorganic Matrix                | 376.00                               |
| Organic Matrix                  | 193.00                               |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.10E+00                                   |
| Am-243  | 2.39E-03                                   |
| Np-237  | 8.45E-05                                   |
| Pu-238  | 2.30E-01                                   |
| Pu-239  | 1.16E+00                                   |
| Pu-240  | 3.05E-01                                   |
| Th-229  | 9.14E-08                                   |
| Th-230  | 3.96E-07                                   |
| Th-232  | 9.15E-14                                   |
| U-233   | 2.71E-05                                   |
| U-234   | 1.24E-03                                   |
| U-235   | 9.93E-05                                   |
| U-236   | 5.16E-05                                   |
| U-238   | 2.10E-03                                   |

## Haz. Waste No(s).

D004, D005, D006,  
D007, D008, D009,  
D010, D011, D022,  
D027, D028, D029,  
D030, D032, D033,  
D034, D037, D038,  
D043, F001, F002,  
F004, F005, F006,  
F007, F009

## TRUCON Code(s)

112/212, 122/222,  
127/227

## Waste Stream Description

Pre-1970 buried waste retrieved for the Idaho Completion Project

Waste Stream ID: **IN-ID-SDA-Soil**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                                       |                 |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Soils           | Waste Matrix Code | S4200      | Handling | CH |
| Source Cat. | Remediation/D&D Waste     | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | ICP Retrieved Soils       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 665.6        | 0.0        | 665.6        |
| <b>Current Form Total</b>   | <b>665.6</b> | <b>0.0</b> | <b>665.6</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 665.6        | 0.0        | 665.6        |
| <b>Final Form Total</b>     | <b>665.6</b> | <b>0.0</b> | <b>665.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 29.30                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 8.37                                 |
| Cements                         | 0.42                                 |
| Inorganic Matrix                | 26.50                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 628.00                               |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.10E+00                                   |
| Am-243  | 2.39E-03                                   |
| Np-237  | 8.45E-05                                   |
| Pu-238  | 2.30E-01                                   |
| Pu-239  | 1.16E+00                                   |
| Pu-240  | 3.05E-01                                   |
| Th-229  | 9.14E-08                                   |
| Th-230  | 3.96E-07                                   |
| Th-232  | 9.15E-14                                   |
| U-233   | 2.71E-05                                   |
| U-234   | 1.24E-03                                   |
| U-235   | 9.93E-05                                   |
| U-236   | 5.16E-05                                   |
| U-238   | 2.10E-03                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D032, D033, D034, D037, D038, D043, F001, F002, F004, F005, F006, F007, F009

## TRUCON Code(s)

112/212, 122/222, 127/227

## Waste Stream Description

Pre-1970 buried waste retrieved for the Idaho Completion Project

Waste Stream ID: **IN-INTEC-SFS-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                                       |                       |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3100      | Handling | RH |
| Source Cat. | Other/Multiple Sources    | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Solidified Fuel Sludge    | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| 30-gal Drum               | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b> | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes                          |            |            |            |
|---|------------|------------|------------|
| Container Type                              | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 0.9        | 0.0        | 0.9        |
| <b>Final Form Total</b>                     | <b>0.9</b> | <b>0.0</b> | <b>0.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 111.95                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 160.11                               |
| Other Inorganic Materials       | 30.74                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 13.58                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.66E+00                                   |
| Cs-137  | 3.54E+00                                   |
| Np-237  | 9.26E-06                                   |
| Pu-238  | 1.90E+00                                   |
| Pu-239  | 2.72E-01                                   |
| Pu-240  | 3.14E-01                                   |
| Pu-241  | 1.79E+01                                   |
| Pu-242  | 1.13E-03                                   |
| Sr-90   | 2.57E+00                                   |
| Th-229  | 2.90E-13                                   |
| Th-230  | 2.21E-08                                   |
| Th-232  | 1.81E-16                                   |
| U-233   | 4.15E-10                                   |
| U-234   | 1.69E-04                                   |
| U-235   | 9.67E-06                                   |
| U-236   | 2.61E-07                                   |
| U-238   | 4.77E-12                                   |

## Haz. Waste No(s).

D008

No TRUCON Codes Provided

## Waste Stream Description

This waste stream was generated at the Idaho Chemical Processing Plant at the INEEL, and may include both combustibles and noncombustibles. The waste includes solidified sludge of acid-dissolved fuel, absorbed into diatomaceous earth.

The waste is contained in two 30-gallon lead-lined drums. The sludge is contained in glass bottles and sealed inside metal cans. Other materials may include glass containers, plastics, metal, scraps, lead shielding, and miscellaneous laboratory equipment. The surface dose rate is limited to 30 R/hr.

Waste Stream ID: **IN-NRF-153**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                                       |                 |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | RH |
| Source Cat. | Other/Multiple Sources    | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Combustible Lab Waste     | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| 30-gal Drum               | 3.1        | 0.0        | 3.1        |
| <b>Current Form Total</b> | <b>3.1</b> | <b>0.0</b> | <b>3.1</b> |

| Final Form Volumes                          |            |            |            |
|---|------------|------------|------------|
| Container Type                              | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 8.0        | 0.0        | 8.0        |
| <b>Final Form Total</b>                     | <b>8.0</b> | <b>0.0</b> | <b>8.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 3.59                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 21.52                                |
| Other Inorganic Materials       | 1.08                                 |
| Cellulosics                     | 2.15                                 |
| Rubber                          | 1.43                                 |
| Plastics                        | 1.79                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.32E-03                                   |
| Np-237  | 7.08E-09                                   |
| Pu-238  | 2.90E-02                                   |
| Pu-239  | 4.05E-04                                   |
| Pu-240  | 4.37E-04                                   |
| Pu-241  | 1.52E-02                                   |
| Pu-242  | 1.45E-06                                   |
| Th-229  | 2.05E-16                                   |
| Th-230  | 3.11E-10                                   |
| Th-232  | 2.34E-19                                   |
| U-233   | 3.05E-13                                   |
| U-234   | 2.48E-06                                   |
| U-235   | 5.92E-06                                   |
| U-236   | 3.50E-10                                   |
| U-238   | 5.91E-15                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

The waste materials include process equipment from the hot cells, various size containers (50 ml to 8 gal), various plastic and paper products, wooden handles, and various woven fabric materials.

Waste Stream ID: **IN-TRA-150**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                                       |                       |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3100      | Handling | RH |
| Source Cat. | R&D/R&D Laboratory Waste  | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Laboratory Waste          | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.1        | 0.0        | 2.1        |
| <b>Current Form Total</b>   | <b>2.1</b> | <b>0.0</b> | <b>2.1</b> |

| Final Form Volumes                          |            |            |            |
|---|------------|------------|------------|
| Container Type                              | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 3.6        | 0.0        | 3.6        |
| <b>Final Form Total</b>                     | <b>3.6</b> | <b>0.0</b> | <b>3.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 343.00                               |
| Other Inorganic Materials       | 22.00                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 41.00                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.06E+01                                   |
| Np-237  | 5.58E-05                                   |
| Pu-238  | 1.11E+01                                   |
| Th-229  | 9.73E-13                                   |
| Th-230  | 3.95E-08                                   |
| U-233   | 1.94E-09                                   |
| U-234   | 5.37E-04                                   |

## Haz. Waste No(s).

D007, D008, D009, D011

No TRUCON Codes Provided

## Waste Stream Description

Sludge from clean-up of the hot cell tank at Test Reactor Area

Waste Stream ID: **IN-TRA-157**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                 |                                       |                 |                   |            |          |    |
|-------------|---------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory       | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5300      | Handling | RH |
| Source Cat. | Source Information Not Compiled | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Miscellaneous Sources           | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 3.1        | 0.0        | 3.1        |
| <b>Current Form Total</b>   | <b>3.1</b> | <b>0.0</b> | <b>3.1</b> |

| Final Form Volumes                          |            |            |            |
|---|------------|------------|------------|
| Container Type                              | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 4.5        | 0.0        | 4.5        |
| <b>Final Form Total</b>                     | <b>4.5</b> | <b>0.0</b> | <b>4.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 236.00                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 338.00                               |
| Other Inorganic Materials       | 65.00                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 29.00                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.51E-02                                   |
| Cm-244  | 2.80E-03                                   |
| Cs-137  | 4.77E-02                                   |
| Np-237  | 1.38E-07                                   |
| Pu-238  | 3.25E-02                                   |
| Pu-239  | 9.38E-04                                   |
| Pu-240  | 4.52E-06                                   |
| Sr-90   | 4.36E-01                                   |
| Th-229  | 5.25E-07                                   |
| Th-230  | 1.53E-08                                   |
| Th-232  | 1.77E-22                                   |
| U-233   | 4.67E-04                                   |
| U-234   | 1.42E-04                                   |
| U-235   | 1.11E-11                                   |
| U-236   | 8.65E-13                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

14 resin drums and one neutron source drum from Test Reactor Area.



Waste Stream ID: **INW161.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                     |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5123                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | WP-INW161.001     | 19.1        |
| <b>Shipped Total</b>        |                   | <b>19.1</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.05                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.43                                 |
| Other Inorganic Materials    | 247.58                               |
| Cellulosics                  | 24.03                                |
| Rubber                       | 0.00                                 |
| Plastics                     | 6.05                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.29E+00                                   |
| Np-237  | 1.60E-06                                   |
| Pu-238  | 2.78E-01                                   |
| Pu-239  | 8.21E+00                                   |
| Pu-240  | 1.86E+00                                   |
| Pu-241  | 1.71E+01                                   |
| Pu-242  | 1.84E-04                                   |
| Th-229  | 1.66E-15                                   |
| Th-230  | 6.31E-10                                   |
| Th-232  | 2.18E-17                                   |
| U-233   | 1.34E-11                                   |
| U-234   | 1.91E-05                                   |
| U-235   | 4.61E-06                                   |
| U-236   | 2.20E-07                                   |
| U-238   | 2.90E-07                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F003, F005, F006, F007, F009

## TRUCON Code(s)

122/222, 125/225

## Waste Stream Description

N/A

Waste Stream ID: **IN-W163.1007**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                       |                                       |            |          |    |
|-------------|--|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                    | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3113      | Handling | CH |
| Source Cat. | Source Unknown                               | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | OIL-DRI RESIDUE FROM INCINERATOR:Direct Ship |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 4.0        | 0.0        | 4.0        |
| <b>Current Form Total</b>   | <b>4.0</b> | <b>0.0</b> | <b>4.0</b> |

| Final Form Volumes                  |             |            |             |
|-------------------------------------|-------------|------------|-------------|
| Container Type                      | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner                 | 1.9         | 0.0        | 1.9         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 9.6         | 0.0        | 9.6         |
| <b>Final Form Total</b>             | <b>11.5</b> | <b>0.0</b> | <b>11.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 205.58                               |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 208.08                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 207.12                               |
| Packaging Material, Plastic     | 13.64                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.71E-01                                   |
| Np-237  | 1.80E-06                                   |
| Pu-238  | 2.39E-01                                   |
| Pu-239  | 7.57E+00                                   |
| Pu-240  | 1.67E+00                                   |
| Pu-241  | 1.37E+01                                   |
| Pu-242  | 3.68E-04                                   |
| Th-229  | 1.95E-14                                   |
| Th-230  | 9.63E-10                                   |
| Th-232  | 3.53E-16                                   |
| U-233   | 4.71E-11                                   |
| U-234   | 1.23E-05                                   |
| U-235   | 1.27E-07                                   |
| U-236   | 8.41E-07                                   |
| U-238   | 9.44E-13                                   |

## Haz. Waste No(s).

F001, F002

No TRUCON Codes Provided

## Waste Stream Description

This waste stream, generated at Rocky Flats Plant, includes Oil-Dri absorbent and waste from laundry and utility operations.

Organic content should be less than 14 lb/ft<sup>3</sup>. No sludges or free liquids should be present. The Oil-Dri should meet WIPP immobilization standards. No explosive or pyrophoric materials should be in this waste.

The material is contained in 55-gallon drums. Inside the drums, the waste may be contained in PE bottles and/or metal paint cans and double-bagged in PE and PVC bags. Some waste may also be contained in PE residue process containers (RPCS). Drums were prepared and inspected according to pre and post-1972 procedures. Starting in 1982, vermiculite instead of Oil-Dri was used in the tops of the drums.

The waste matrix composition listed is for the incinerator waste. No information is available concerning the laundry and utility operation waste.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-W167.149**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                                       |            |          |    |
|-------------|---|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory               | Final Waste Form      | Solidified Organics | Waste Matrix Code                     | S3114      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SOLIDIFIED ORGANICS:Direct Ship         |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 169.1        | 0.0        | 169.1        |
| <b>Current Form Total</b>   | <b>169.1</b> | <b>0.0</b> | <b>169.1</b> |

| Final Form Volumes                  |              |            |              |
|-------------------------------------|--------------|------------|--------------|
| Container Type                      | Stored       | Proj.      | Total        |
| SWB Dir Ld w/ Liner                 | 62.4         | 0.0        | 62.4         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 320.9        | 0.0        | 320.9        |
| <b>Final Form Total</b>             | <b>383.3</b> | <b>0.0</b> | <b>383.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 347.48                               |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 109.49                               |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 151.01                               |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 207.25                               |
| Packaging Material, Plastic     | 13.68                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.64E-02                                   |
| Np-237  | 1.95E-07                                   |
| Pu-238  | 1.10E-02                                   |
| Pu-239  | 3.49E-01                                   |
| Pu-240  | 7.70E-02                                   |
| Pu-241  | 6.31E-01                                   |
| Pu-242  | 1.40E-05                                   |
| Th-229  | 3.11E-15                                   |
| Th-230  | 4.45E-11                                   |
| Th-232  | 1.63E-17                                   |
| U-233   | 6.33E-12                                   |
| U-234   | 5.69E-07                                   |
| U-235   | 5.85E-09                                   |
| U-236   | 3.88E-08                                   |
| U-238   | 3.59E-14                                   |

## Haz. Waste No(s).

D022, F001, F003

## TRUCON Code(s)

112/212

## Waste Stream Description

TRU solid organic waste consists of cemented or absorbed organic liquids from production or laboratory processes. The content code packaged as112 includes IDC 003.

Waste Stream ID: **INW169.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                 |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5330                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | WP-INW169.001     | 19.1        |
| <b>Shipped Total</b>        |                   | <b>19.1</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.24                                 |
| Aluminum-based Metals/Alloys | 0.05                                 |
| Other Metals                 | 3.52                                 |
| Other Inorganic Materials    | 7.37                                 |
| Cellulosics                  | 130.27                               |
| Rubber                       | 0.73                                 |
| Plastics                     | 7.38                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.40E-01                                   |
| Np-237  | 3.01E-07                                   |
| Pu-238  | 3.46E-02                                   |
| Pu-239  | 1.03E+00                                   |
| Pu-240  | 2.30E-01                                   |
| Pu-241  | 2.38E+00                                   |
| Pu-242  | 3.09E-05                                   |
| Th-229  | 3.14E-16                                   |
| Th-230  | 5.67E-10                                   |
| Th-232  | 2.69E-18                                   |
| U-233   | 2.53E-12                                   |
| U-234   | 1.59E-05                                   |
| U-235   | 3.78E-06                                   |
| U-236   | 2.72E-08                                   |
| U-238   | 2.29E-07                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D011, D022,  
F001, F002, F003,  
F005, F006, F007,  
F009

## TRUCON Code(s)

116/216

## Waste Stream Description

N/A

Waste Stream ID: **IN-W181.162**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory                          | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3120      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | LAUNDRY SLUDGE                                     | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Box - Misc                | 34.9        | 0.0        | 34.9        |
| <b>Current Form Total</b> | <b>34.9</b> | <b>0.0</b> | <b>34.9</b> |

| Final Form Volumes                  |             |            |             |
|-------------------------------------|-------------|------------|-------------|
| Container Type                      | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner                 | 13.2        | 0.0        | 13.2        |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 67.1        | 0.0        | 67.1        |
| <b>Final Form Total</b>             | <b>80.3</b> | <b>0.0</b> | <b>80.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 2.96                                 |
| Other Inorganic Materials       | 30.25                                |
| Cellulosics                     | 30.25                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 8.18                                 |
| Cements                         | 268.45                               |
| Inorganic Matrix                | 402.68                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 207.12                               |
| Packaging Material, Plastic     | 13.64                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.76E-02                                   |
| Np-237  | 1.19E-07                                   |
| Pu-238  | 1.05E-02                                   |
| Pu-239  | 3.39E-01                                   |
| Pu-240  | 7.69E-02                                   |
| Pu-241  | 9.04E-01                                   |
| Pu-242  | 5.54E-06                                   |
| Th-229  | 1.29E-15                                   |
| Th-230  | 4.23E-11                                   |
| Th-232  | 1.63E-17                                   |
| U-233   | 3.11E-12                                   |
| U-234   | 5.42E-07                                   |
| U-235   | 5.68E-09                                   |
| U-236   | 3.88E-08                                   |
| U-238   | 1.42E-14                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, F001, F002,  
F003

## TRUCON Code(s)

111/211

## Waste Stream Description

This waste is from Rocky Flats. The waste consists of sludge from laundry operations that have been cemented in portland. The cement is described as a poor grade. Volume for this waste stream has increased significantly from the TWBIR Revision 2 volumes due to the additional Alpha Mixed Low-level waste (AMLLW).

Waste Stream ID: **IN-W188.160**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                       |                                       |            |          |    |
|-------------|--|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                          | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3120      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | BLDG 776 PROCESS SLUDGE:Direct Ship                |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 1.5         | 0.0        | 1.5         |
| Box - Misc                  | 63.4        | 0.0        | 63.4        |
| <b>Current Form Total</b>   | <b>64.9</b> | <b>0.0</b> | <b>64.9</b> |

| Final Form Volumes                  |              |            |              |
|-------------------------------------|--------------|------------|--------------|
| Container Type                      | Stored       | Proj.      | Total        |
| SWB Dir Ld w/ Liner                 | 24.6         | 0.0        | 24.6         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 124.5        | 0.0        | 124.5        |
| <b>Final Form Total</b>             | <b>149.1</b> | <b>0.0</b> | <b>149.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 1.46                                 |
| Other Inorganic Materials       | 15.79                                |
| Cellulosics                     | 6.62                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 4.10                                 |
| Cements                         | 193.25                               |
| Inorganic Matrix                | 289.87                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 207.12                               |
| Packaging Material, Plastic     | 13.64                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.73E-02                                   |
| Np-237  | 1.17E-07                                   |
| Pu-238  | 1.56E-02                                   |
| Pu-239  | 4.94E-01                                   |
| Pu-240  | 1.09E-01                                   |
| Pu-241  | 8.96E-01                                   |
| Pu-242  | 2.01E-05                                   |
| Th-229  | 1.28E-15                                   |
| Th-230  | 6.28E-11                                   |
| Th-232  | 2.31E-17                                   |
| U-233   | 3.08E-12                                   |
| U-234   | 8.03E-07                                   |
| U-235   | 8.28E-09                                   |
| U-236   | 5.49E-08                                   |
| U-238   | 5.15E-14                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D022, D028,  
F001, F002, F003

## TRUCON Code(s)

111/211

## Waste Stream Description

This waste is from Rocky Flats and consists of sludge from floor drains in a Pu process facility that have been cemented in portland. The cement is described as a poor grade. Also may be laundry sludges, material contents given are for an organic laundry sludge.

Waste Stream ID: **INW198.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                                       |                 |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5310      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | WP-INW198.001     | 49.1        |
| <b>Shipped Total</b>        |                   | <b>49.1</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.17                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 2.55                                 |
| Other Inorganic Materials    | 13.60                                |
| Cellulosics                  | 0.44                                 |
| Rubber                       | 0.53                                 |
| Plastics                     | 86.81                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.22E-01                                   |
| Np-237  | 1.51E-07                                   |
| Pu-238  | 2.44E-02                                   |
| Pu-239  | 7.70E-01                                   |
| Pu-240  | 1.72E-01                                   |
| Pu-241  | 1.62E+00                                   |
| Pu-242  | 1.81E-05                                   |
| Th-229  | 1.99E-09                                   |
| Th-230  | 1.09E-10                                   |
| Th-232  | 2.02E-18                                   |
| U-233   | 5.30E-06                                   |
| U-234   | 3.17E-06                                   |
| U-235   | 7.28E-07                                   |
| U-236   | 2.04E-08                                   |
| U-238   | 1.20E-06                                   |

## Haz. Waste No(s).

|  |
|--|
| D006, D007, D008,<br>D009, D011, D022,<br>F001, F002, F003,<br>F005, F006, F007,<br>F009 |
|--|

## TRUCON Code(s)

|         |
|---------|
| 116/216 |
|---------|

## Waste Stream Description

N/A

Waste Stream ID: **IN-W208.243**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory               | Final Waste Form      | Filter          | Waste Matrix Code                     | S5410      | Handling | RH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Absolute 8X8 filters:RHUncert           |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Current Form Total</b>   | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

| Final Form Volumes                          |            |            |            |
|---|------------|------------|------------|
| Container Type                              | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 0.9        | 0.0        | 0.9        |
| <b>Final Form Total</b>                     | <b>0.9</b> | <b>0.0</b> | <b>0.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 16.75                                |
| Aluminum-based Metals/Alloys    | 14.25                                |
| Other Metals                    | 1.06                                 |
| Other Inorganic Materials       | 17.77                                |
| Cellulosics                     | 86.85                                |
| Rubber                          | 8.58                                 |
| Plastics                        | 35.61                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.36                                 |
| Organic Matrix                  | 0.03                                 |
| Soils/gravel                    | 0.13                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.83E+01                                   |
| Np-237  | 9.43E-05                                   |
| Pu-238  | 1.47E+00                                   |
| Pu-239  | 4.78E+01                                   |
| Pu-240  | 1.08E+01                                   |
| Pu-241  | 1.21E+02                                   |
| Pu-242  | 7.80E-04                                   |
| Th-229  | 1.90E-12                                   |
| Th-230  | 6.67E-09                                   |
| Th-232  | 2.56E-15                                   |
| U-233   | 3.49E-09                                   |
| U-234   | 8.05E-05                                   |
| U-235   | 3.94E-05                                   |
| U-236   | 5.76E-06                                   |
| U-238   | 2.12E-12                                   |

## Haz. Waste No(s).

D022, D028, D029,  
F001, F002, F003,  
F005No TRUCON  
Codes Provided

## Waste Stream Description

This waste stream, generated at the Rocky Flats Plant, consists of absolute filters used for filtering intake and exhaust air from glovebox lines. The filters are composed of wood or particle board frames and an asbestos-type filter media. The waste may include limited amounts of combustible materials (surgical gloves, etc.). Several sizes of filters may be present. This code has not been used since 1975. Since then absolute filters were processed as Content Code 338 (insulation and CWS filter media) or 376 (cemented insulation and filter media). Some of the drums may be lead lined. There is a lack of information about the particulate on the filter media. Although there may be some organic material, it should be less than 14 lb/ft<sup>3</sup>. Significant amounts of respirable fines may be present. No sludges or free liquids should be present. No explosive, pyrophoric, or corrosive materials should be in this waste, except for some residual amounts of nitric acid. Each filter is double contained in PVC and PE bags and assayed. Up to 12-20 filters are placed in each prepared drum. Small amounts of Oil-Dri are added to drums containing damp filters. Drums were packed according to the usual pre-1972 procedures.



Waste Stream ID: **INW211.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                 |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Filter          | Waste Matrix Code | S5410                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                   |                   |              |
|-----------------------------------|-------------------|--------------|
| Container Type                    | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner       | WP-INW211.001     | 299.9        |
| 55-gal Drum Dir Ld w/o Liner      | WP-INW211.001     | 0.2          |
| SWB w/ 4 - 55-gal Drums w/ Liners | WP-INW211.001     | 3.8          |
| <b>Shipped Total</b>              |                   | <b>303.9</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.05                                 |
| Aluminum-based Metals/Alloys | 8.60                                 |
| Other Metals                 | 0.41                                 |
| Other Inorganic Materials    | 22.38                                |
| Cellulosics                  | 136.35                               |
| Rubber                       | 0.08                                 |
| Plastics                     | 7.29                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.01                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.41E+00                                   |
| Np-237  | 2.99E-06                                   |
| Pu-238  | 4.37E-01                                   |
| Pu-239  | 1.20E+01                                   |
| Pu-240  | 2.67E+00                                   |
| Pu-241  | 3.21E+01                                   |
| Pu-242  | 4.62E-04                                   |
| Th-229  | 1.60E-08                                   |
| Th-230  | 5.35E-10                                   |
| Th-232  | 3.13E-17                                   |
| U-233   | 4.26E-05                                   |
| U-234   | 1.74E-05                                   |
| U-235   | 3.14E-06                                   |
| U-236   | 3.17E-07                                   |
| U-238   | 4.84E-06                                   |

## Haz. Waste No(s).

D005, D007, D008, D009, D011, D022, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

119/219

## Waste Stream Description

N/A

Waste Stream ID: **INW216.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                       |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3121                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                         |                   |               |
|---|-------------------|---------------|
| Container Type                          | Ref. Waste Stream | Volume        |
| 55-gal Drum Dir Ld w/ Liner             | WP-INW216.001     | 1227.4        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | WP-INW216.001     | 0.6           |
| SWB Dir Ld w/o Liner                    | WP-INW216.001     | 11.3          |
| SWB w/ 4 - 55-gal Drums w/ Liners       | WP-INW216.001     | 5.7           |
| <b>Shipped Total</b>                    |                   | <b>1245.1</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.01                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.08                                 |
| Other Inorganic Materials    | 12.65                                |
| Cellulosics                  | 0.19                                 |
| Rubber                       | 0.01                                 |
| Plastics                     | 0.53                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 829.38                               |
| Organic Matrix               | 0.18                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.58E+01                                   |
| Np-237  | 7.45E-05                                   |
| Pu-238  | 9.01E-02                                   |
| Pu-239  | 2.62E+00                                   |
| Pu-240  | 5.88E-01                                   |
| Pu-241  | 6.53E+00                                   |
| Pu-242  | 9.49E-05                                   |
| Th-229  | 1.26E-08                                   |
| Th-230  | 2.25E-08                                   |
| Th-232  | 1.08E-17                                   |
| U-233   | 2.69E-05                                   |
| U-234   | 5.00E-04                                   |
| U-235   | 8.28E-05                                   |
| U-236   | 8.72E-08                                   |
| U-238   | 3.12E-03                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

111/211, 116/216

## Waste Stream Description

N/A

Waste Stream ID: **IN-W216.876**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory                    | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3121      | Handling | RH |
| Source Cat. | Pollution Control or Waste Treatment Process | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | First Stage Sludge:RH-uncertifiable          | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 10.2        | 0.0        | 10.2        |
| <b>Current Form Total</b>   | <b>10.2</b> | <b>0.0</b> | <b>10.2</b> |

| Final Form Volumes                          |             |            |             |
|---|-------------|------------|-------------|
| Container Type                              | Stored      | Proj.      | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 15.1        | 0.0        | 15.1        |
| <b>Final Form Total</b>                     | <b>15.1</b> | <b>0.0</b> | <b>15.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 44.60                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 4.14                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 744.00                               |
| Organic Matrix                  | 14.90                                |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.07E+01                                   |
| Np-237  | 2.99E-04                                   |
| Pu-238  | 7.06E-02                                   |
| Pu-239  | 2.30E+00                                   |
| Pu-240  | 5.22E-01                                   |
| Pu-241  | 5.84E+00                                   |
| Pu-242  | 3.76E-05                                   |
| Th-229  | 6.61E-12                                   |
| Th-230  | 3.21E-10                                   |
| Th-232  | 1.24E-16                                   |
| U-233   | 1.17E-08                                   |
| U-234   | 3.88E-06                                   |
| U-235   | 4.08E-08                                   |
| U-236   | 2.79E-07                                   |
| U-238   | 1.02E-13                                   |

## Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D022, D028, F001, F002, F003

**No TRUCON Codes Provided**

## Waste Stream Description

Waste consists of a wet sludge produced from treating aqueous process wastes, such as ion exchange column effluent, distillates, and caustic scrub solutions generated by Plutonium Recovery Operations (Building 771). Portland cement is added to the waste package for absorption of free liquids. Waste drums may periodically contain surgeons' gloves, glovebox gloves, etc. Since the fall of 1979, First-stage sludge (IDC 001) and Second-stage sludge (IDC 002) have been combined into Content Code 1 - Combined sludge. Sludge is produced by treating aqueous wastes by the carrier precipitation process. Aqueous wastes are made basic, if necessary, with sodium hydroxide. Radioactive elements such as plutonium and americium are chemically precipitated from the liquid waste. Treatment chemicals include ferric sulfate, calcium chloride, magnesium sulfate, and flocculating agents. The treatment process produces a precipitate of the hydrated oxides of iron, magnesium, aluminum, silicon, etc., which also carries the hydrated oxides of plutonium and americium. The precipitate or slurry is filtered to produce a sludge containing 50 to 70 percent water. Liquid wastes were analyzed for fissile content prior to release from Buildings 771 and 774, and were retained at Building 771 for further treatment if contaminated with above-discard amounts of plutonium.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-W216.877**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory                    | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3121      | Handling | RH |
| Source Cat. | Pollution Control or Waste Treatment Process | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | FIRST STAGE SLUDGE:RH-cert-repack            | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 30.2        | 0.0        | 30.2        |
| <b>Current Form Total</b>   | <b>30.2</b> | <b>0.0</b> | <b>30.2</b> |

| Final Form Volumes                          |             |            |             |
|---|-------------|------------|-------------|
| Container Type                              | Stored      | Proj.      | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 43.6        | 0.0        | 43.6        |
| <b>Final Form Total</b>                     | <b>43.6</b> | <b>0.0</b> | <b>43.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 2.30                                 |
| Other Inorganic Materials       | 24.20                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 6.60                                 |
| Cements                         | 215.30                               |
| Inorganic Matrix                | 323.00                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.53E+01                                   |
| Np-237  | 1.49E-04                                   |
| Pu-238  | 3.53E-02                                   |
| Pu-239  | 1.15E+00                                   |
| Pu-240  | 2.61E-01                                   |
| Pu-241  | 2.93E+00                                   |
| Pu-242  | 1.88E-05                                   |
| Th-229  | 3.30E-12                                   |
| Th-230  | 1.61E-10                                   |
| Th-232  | 6.19E-17                                   |
| U-233   | 5.85E-09                                   |
| U-234   | 1.94E-06                                   |
| U-235   | 2.04E-08                                   |
| U-236   | 1.39E-07                                   |
| U-238   | 5.11E-14                                   |

## Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D022, D028, F001, F002, F003

## TRUCON Code(s)

111/211

## Waste Stream Description

Waste consists of a wet sludge produced from treating aqueous process wastes, such as ion exchange column effluent, distillates, and caustic scrub solutions generated by Plutonium Recovery Operations (Building 771). Portland cement is added to the waste package for absorption of free liquids. Waste drums may periodically contain surgeons' gloves, glovebox gloves, etc. Since the fall of 1979, first-stage sludge (IDC 001) and Second stage sludge (IDC 002) have been combined into Content Code 1 - Combined sludge. Sludge is produced by treating aqueous wastes by the carrier precipitation process. Aqueous wastes are made basic, if necessary, with sodium hydroxide. Radioactive elements such as plutonium and americium are chemically precipitated from the liquid waste. Treatment chemicals include ferric sulfate, calcium chloride, magnesium sulfate, and flocculating agents. The treatment process produces a precipitate of the hydrated oxides of iron, magnesium, aluminum, silicon, etc., which also carries the hydrated oxides of plutonium and americium. The precipitate or slurry is filtered to produce a sludge containing 50 to 70 percent water. Liquid wastes were analyzed for fissile content prior to release from Buildings 771 and 774, and were retained at Building 771 for further treatment if contaminated with above-discard amounts of plutonium.

Waste Stream ID: **INW218.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                       |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3121                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                   |                   |               |
|-----------------------------------|-------------------|---------------|
| Container Type                    | Ref. Waste Stream | Volume        |
| 55-gal Drum Dir Ld w/ Liner       | WP-INW218.001     | 833.0         |
| SWB Dir Ld w/o Liner              | WP-INW218.001     | 275.9         |
| SWB w/ 4 - 55-gal Drums w/ Liners | WP-INW218.001     | 1.9           |
| <b>Shipped Total</b>              |                   | <b>1110.9</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.01                                 |
| Other Inorganic Materials    | 16.30                                |
| Cellulosics                  | 0.16                                 |
| Rubber                       | 0.01                                 |
| Plastics                     | 1.25                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 753.19                               |
| Organic Matrix               | 0.19                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.45E-01                                   |
| Np-237  | 1.20E-06                                   |
| Pu-238  | 1.51E-02                                   |
| Pu-239  | 4.48E-01                                   |
| Pu-240  | 1.00E-01                                   |
| Pu-241  | 1.10E+00                                   |
| Pu-242  | 1.53E-05                                   |
| Th-229  | 4.70E-09                                   |
| Th-230  | 3.74E-08                                   |
| Th-232  | 1.83E-18                                   |
| U-233   | 1.00E-05                                   |
| U-234   | 8.32E-04                                   |
| U-235   | 9.20E-05                                   |
| U-236   | 1.48E-08                                   |
| U-238   | 7.87E-03                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D010, D011,  
D032, F001, F002,  
F005, F006, F007,  
F009

## TRUCON Code(s)

111/211, 116/216

## Waste Stream Description

N/A

Waste Stream ID: **IN-W219.110**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                     |                                       |            |          |    |
|-------------|--|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                      | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code                     | S3120      | Handling | CH |
| Source Cat. | Other/Multiple Sources                         | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SOLIDIFIED GRINDING SLUDGE, ETC.:Uncertifiable |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 7.5        | 0.0        | 7.5        |
| <b>Current Form Total</b>   | <b>7.5</b> | <b>0.0</b> | <b>7.5</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 7.7        | 0.0        | 7.7        |
| <b>Final Form Total</b>      | <b>7.7</b> | <b>0.0</b> | <b>7.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 2500.00                              |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.36E-01                                   |
| Np-237  | 4.29E-07                                   |
| Pu-238  | 3.80E-02                                   |
| Pu-239  | 1.23E+00                                   |
| Pu-240  | 2.79E-01                                   |
| Pu-241  | 3.28E+00                                   |
| Pu-242  | 2.01E-05                                   |
| Th-229  | 4.67E-15                                   |
| Th-230  | 1.53E-10                                   |
| Th-232  | 5.90E-17                                   |
| U-233   | 1.13E-11                                   |
| U-234   | 1.96E-06                                   |
| U-235   | 2.06E-08                                   |
| U-236   | 1.41E-07                                   |
| U-238   | 5.15E-14                                   |

## Haz. Waste No(s).

F001, F002

No TRUCON Codes Provided

## Waste Stream Description

This waste stream, generated at Bettis Atomic Power Laboratory, consists of solidified grinding sludge and associated filters, rags, etc. The sludge can contain abraded grinding wheel material, which includes diamond dust, aluminum oxide, carborundum, and rubber. The waste is in either powder or cakes and contains not more than 10% of other waste items.

There are high levels of fines. In addition the drums may contain free liquids. The estimated organic content is less than 1 lb/ft<sup>3</sup>. No particle size data are provided, but it is assumed that WIPP-WAC limits for fines would be exceeded. No free liquids should be present. No explosive, pyrophoric, or corrosive material should be in the waste.

Both 17c and 6m 55-gallon drums were used for packaging the waste. Fissile content was determined by calculating the weight difference by chemical analysis or by an assay gauge.

Waste Stream ID: **IN-W219.914**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                                       |            |          |    |
|-------------|---|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                       | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3120      | Handling | CH |
| Source Cat. | Other/Multiple Sources                          | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SOLIDIFIED GRINDING SLUDGE, ETC.:RH Direct Ship |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.9        | 0.0        | 1.9        |
| <b>Current Form Total</b>   | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

| Final Form Volumes                |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>           | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 1.11                                 |
| Other Inorganic Materials       | 11.97                                |
| Cellulosics                     | 5.02                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 3.11                                 |
| Cements                         | 146.59                               |
| Inorganic Matrix                | 219.88                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 211.10                               |
| Packaging Material, Plastic     | 16.30                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.50E-02                                   |
| Np-237  | 1.42E-07                                   |
| Pu-238  | 1.25E-02                                   |
| Pu-239  | 4.06E-01                                   |
| Pu-240  | 9.20E-02                                   |
| Pu-241  | 1.08E+00                                   |
| Pu-242  | 6.63E-06                                   |
| Th-229  | 1.54E-15                                   |
| Th-230  | 5.04E-11                                   |
| Th-232  | 1.95E-17                                   |
| U-233   | 3.71E-12                                   |
| U-234   | 6.45E-07                                   |
| U-235   | 6.80E-09                                   |
| U-236   | 4.64E-08                                   |
| U-238   | 1.70E-14                                   |

## Haz. Waste No(s).

F001, F002

No TRUCON Codes Provided

## Waste Stream Description

This waste stream, generated at Bettis Atomic Power Laboratory, consists of solidified grinding sludge and associated filters, rags, etc. The sludge can contain abraded grinding wheel material, which includes diamond dust, aluminum oxide, carborundum, and rubber. The waste is in either powder or cakes and contains not more than 10% of other waste items.

There are high levels of fines. In addition the drums may contain free liquids. The estimated organic content is less than 1 lb/ft<sup>3</sup>. No particle size data are provided, but it is assumed that WIPP-WAC limits for fines would be exceeded. No free liquids should be present. No explosive, pyrophoric, or corrosive material should be in the waste.

Both 17c and 6m 55-gallon drums were used for packaging the waste. Fissile content was determined by calculating the weight difference by chemical analysis or by an assay gauge.

Waste Stream ID: **INW222.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                       |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3150                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | WP-INW222.001     | 65.1        |
| <b>Shipped Total</b>        |                   | <b>65.1</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.03                                 |
| Other Inorganic Materials    | 0.76                                 |
| Cellulosics                  | 0.04                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 16.36                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 566.62                               |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.10E-01                                   |
| Np-237  | 1.01E-06                                   |
| Pu-238  | 1.53E-01                                   |
| Pu-239  | 4.36E+00                                   |
| Pu-240  | 9.80E-01                                   |
| Pu-241  | 1.00E+01                                   |
| Pu-242  | 1.14E-04                                   |
| Th-229  | 1.05E-15                                   |
| Th-230  | 5.05E-10                                   |
| Th-232  | 1.15E-17                                   |
| U-233   | 8.44E-12                                   |
| U-234   | 1.49E-05                                   |
| U-235   | 1.62E-06                                   |
| U-236   | 1.16E-07                                   |
| U-238   | 1.08E-04                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, F001, F002, F003, F005, F006, F007, F009

## TRUCON Code(s)

111/211, 125/225

## Waste Stream Description

N/A



Waste Stream ID: **IN-W222.116**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory                    | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3123      | Handling | CH |
| Source Cat. | Pollution Control or Waste Treatment Process | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | CEMENTED SLUDGE:Direct Ship                  | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 115.2        | 0.0        | 115.2        |
| <b>Current Form Total</b>   | <b>115.2</b> | <b>0.0</b> | <b>115.2</b> |

| Final Form Volumes                  |              |            |              |
|-------------------------------------|--------------|------------|--------------|
| Container Type                      | Stored       | Proj.      | Total        |
| SWB Dir Ld w/ Liner                 | 43.5         | 0.0        | 43.5         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 215.6        | 0.0        | 215.6        |
| <b>Final Form Total</b>             | <b>259.0</b> | <b>0.0</b> | <b>259.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.09                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 6.96                                 |
| Cellulosics                     | 0.26                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 26.56                                |
| Cements                         | 73.80                                |
| Inorganic Matrix                | 110.70                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 206.93                               |
| Packaging Material, Plastic     | 13.60                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.76E-01                                   |
| Np-237  | 8.86E-07                                   |
| Pu-238  | 1.13E-01                                   |
| Pu-239  | 3.57E+00                                   |
| Pu-240  | 7.88E-01                                   |
| Pu-241  | 6.49E+00                                   |
| Pu-242  | 1.43E-04                                   |
| Th-229  | 9.95E-15                                   |
| Th-230  | 4.55E-10                                   |
| Th-232  | 1.67E-16                                   |
| U-233   | 2.36E-11                                   |
| U-234   | 5.82E-06                                   |
| U-235   | 5.98E-08                                   |
| U-236   | 3.97E-07                                   |
| U-238   | 3.67E-13                                   |

## Haz. Waste No(s).

D006, D008, F001, F002, F003

No TRUCON Codes Provided

## Waste Stream Description

This waste stream, generated at Rocky Flats Plant, consists of sludge from the incinerator off-gas system, recovery building filter plenums, pumps, etc. Portland cement is added to absorb free liquids. The sludge may contain a limited number of surgical gloves. Content Code 292 replaced Code 290 in 1974.

Before 1977, sludge was sealed in PVC bags, double-contained in plastic and placed in 1-gallon metal paint cans. Portland cement was added to the bottom and top of the can. After 1977, sludge was placed in 1-gallon PE bottles with layers of portland cement. Each can (or bottle) was assayed and placed in groups of about 25 into prepared 55-gallon drums. Drum preparation was in accordance with pre and post 1972 procedures. Starting in 1982, vermiculite replaced Oil-Dri as the material between the top of the waste material and the drum liner lid.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-W228.884**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                     |                                       |            |          |    |
|-------------|--|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                    | Final Waste Form      | Solidified Organics | Waste Matrix Code                     | S3121      | Handling | RH |
| Source Cat. | Pollution Control or Waste Treatment Process | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SECOND STAGE SLUDGE:RH-uncert-other          |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 6.0        | 0.0        | 6.0        |
| <b>Current Form Total</b>   | <b>6.0</b> | <b>0.0</b> | <b>6.0</b> |

| Final Form Volumes                          |            |            |            |
|---|------------|------------|------------|
| Container Type                              | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 8.9        | 0.0        | 8.9        |
| <b>Final Form Total</b>                     | <b>8.9</b> | <b>0.0</b> | <b>8.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 44.60                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 4.14                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 744.00                               |
| Organic Matrix                  | 14.90                                |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.40E-01                                   |
| Np-237  | 4.33E-06                                   |
| Pu-238  | 5.60E-03                                   |
| Pu-239  | 1.83E-01                                   |
| Pu-240  | 4.14E-02                                   |
| Pu-241  | 4.62E-01                                   |
| Pu-242  | 2.98E-06                                   |
| Th-229  | 9.49E-14                                   |
| Th-230  | 2.55E-11                                   |
| Th-232  | 9.84E-18                                   |
| U-233   | 1.69E-10                                   |
| U-234   | 3.08E-07                                   |
| U-235   | 3.25E-09                                   |
| U-236   | 2.21E-08                                   |
| U-238   | 8.09E-15                                   |

## Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D022, D028, F001, F002, F003

**No TRUCON Codes Provided**

## Waste Stream Description

Waste consists of a wet sludge produced from treatment of other plant radioactive and/or chemical contaminated wastes and further treatment of the first-stage effluent. Portland cement was added to the waste package for absorption of free liquids. Second-stage sludge drums packaged prior to 1973 may contain other waste such as electric motors, bottles of chemical (usually liquid) wastes, mercury, lithium batteries, and small amounts of contaminated mercury in pint bottles. Radioactive sources were also periodically included in second-stage drums through 1979. Since the fall of 1979, Second stage sludge (IDC 002) have been combined into Content Code 1 - Combined sludge. Content code 2 is no longer used. Sludge is produced by treating aqueous wastes by the carrier precipitation process. Aqueous wastes are made basic, if necessary, with sodium hydroxide. Radioactive elements such as plutonium and americium are chemically precipitated from the liquid waste. Treatment chemicals include ferric sulfate, calcium chloride, magnesium sulfate, and flocculating agents. The treatment process produces a precipitate of the hydrated oxides of iron, magnesium, aluminum, silicon, etc., which also carries the hydrated oxides of plutonium and americium. The precipitate or slurry is filtered to produce a sludge containing 50 to 70 percent water. Liquid wastes were analyzed for fissile content prior to release from Buildings 771 and 774, and were retained at Building 771 for further treatment if contaminated with above-discard amounts of plutonium.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-W228.885**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                     |                                       |            |          |    |
|-------------|--|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                    | Final Waste Form      | Solidified Organics | Waste Matrix Code                     | S3121      | Handling | RH |
| Source Cat. | Pollution Control or Waste Treatment Process | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SECOND STAGE SLUDGE:RH-uncert-Hg             |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes                          |            |            |            |
|---|------------|------------|------------|
| Container Type                              | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 0.9        | 0.0        | 0.9        |
| <b>Final Form Total</b>                     | <b>0.9</b> | <b>0.0</b> | <b>0.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 44.60                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 4.14                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 744.00                               |
| Organic Matrix                  | 14.90                                |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.23E-01                                   |
| Np-237  | 7.19E-07                                   |
| Pu-238  | 9.37E-04                                   |
| Pu-239  | 3.05E-02                                   |
| Pu-240  | 6.91E-03                                   |
| Pu-241  | 7.74E-02                                   |
| Pu-242  | 4.97E-07                                   |
| Th-229  | 1.58E-14                                   |
| Th-230  | 4.26E-12                                   |
| Th-232  | 1.64E-18                                   |
| U-233   | 2.80E-11                                   |
| U-234   | 5.14E-08                                   |
| U-235   | 5.41E-10                                   |
| U-236   | 3.69E-09                                   |
| U-238   | 1.35E-15                                   |

## Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D022, D028, F001, F002, F003

**No TRUCON Codes Provided**

## Waste Stream Description

Waste consists of a wet sludge produced from treatment of other plant radioactive and/or chemical contaminated wastes and further treatment of the first-stage effluent. Portland cement was added to the waste package for absorption of free liquids. Second-stage sludge drums packaged prior to 1973 may contain other waste such as electric motors, bottles of chemical (usually liquid) wastes, mercury, lithium batteries, and small amounts of contaminated mercury in pint bottles. Radioactive sources were also periodically included in second-stage drums through 1979. Since the fall of 1979, Second stage sludge (IDC 002) have been combined into Content Code 1 - Combined sludge. Content code 2 is no longer used. Sludge is produced by treating aqueous wastes by the carrier precipitation process. Aqueous wastes are made basic, if necessary, with sodium hydroxide. Radioactive elements such as plutonium and americium are chemically precipitated from the liquid waste. Treatment chemicals include ferric sulfate, calcium chloride, magnesium sulfate, and flocculating agents. The treatment process produces a precipitate of the hydrated oxides of iron, magnesium, aluminum, silicon, etc., which also carries the hydrated oxides of plutonium and americium. The precipitate or slurry is filtered to produce a sludge containing 50 to 70 percent water. Liquid wastes were analyzed for fissile content prior to release from Buildings 771 and 774, and were retained at Building 771 for further treatment if contaminated with above-discard amounts of plutonium.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-W228.886**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                     |                                       |            |          |    |
|-------------|--|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                    | Final Waste Form      | Solidified Organics | Waste Matrix Code                     | S3121      | Handling | RH |
| Source Cat. | Pollution Control or Waste Treatment Process | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SECOND STAGE SLUDGE:RH-uncert-repack         |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 14.8        | 0.0        | 14.8        |
| <b>Current Form Total</b>   | <b>14.8</b> | <b>0.0</b> | <b>14.8</b> |

| Final Form Volumes                          |             |            |             |
|---|-------------|------------|-------------|
| Container Type                              | Stored      | Proj.      | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 21.4        | 0.0        | 21.4        |
| <b>Final Form Total</b>                     | <b>21.4</b> | <b>0.0</b> | <b>21.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 15.80                                |
| Cellulosics                     | 0.10                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 2.20                                 |
| Cements                         | 92.60                                |
| Inorganic Matrix                | 138.90                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.70E-01                                   |
| Np-237  | 2.16E-06                                   |
| Pu-238  | 2.80E-03                                   |
| Pu-239  | 9.15E-02                                   |
| Pu-240  | 2.07E-02                                   |
| Pu-241  | 2.32E-01                                   |
| Pu-242  | 1.49E-06                                   |
| Th-229  | 4.74E-14                                   |
| Th-230  | 1.27E-11                                   |
| Th-232  | 4.91E-18                                   |
| U-233   | 8.43E-11                                   |
| U-234   | 1.54E-07                                   |
| U-235   | 1.62E-09                                   |
| U-236   | 1.10E-08                                   |
| U-238   | 4.05E-15                                   |

## Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D022, D028, F001, F002, F003

## TRUCON Code(s)

111/211

## Waste Stream Description

Waste consists of a wet sludge produced from treatment of other plant radioactive and/or chemical contaminated wastes and further treatment of the first-stage effluent. Portland cement was added to the waste package for absorption of free liquids. Second-stage sludge drums packaged prior to 1973 may contain other waste such as electric motors, bottles of chemical (usually liquid) wastes, mercury, lithium batteries, and small amounts of contaminated mercury in pint bottles. Radioactive sources were also periodically included in second-stage drums through 1979. Since the fall of 1979, Second stage sludge (IDC 002) have been combined into Content Code 1 - Combined sludge. Content code 2 is no longer used. Sludge is produced by treating aqueous wastes by the carrier precipitation process. Aqueous wastes are made basic, if necessary, with sodium hydroxide. Radioactive elements such as plutonium and americium are chemically precipitated from the liquid waste. Treatment chemicals include ferric sulfate, calcium chloride, magnesium sulfate, and flocculating agents. The treatment process produces a precipitate of the hydrated oxides of iron, magnesium, aluminum, silicon, etc., which also carries the hydrated oxides of plutonium and americium. The precipitate or slurry is filtered to produce a sludge containing 50 to 70 percent water. Liquid wastes were analyzed for fissile content prior to release from Buildings 771 and 774, and were retained at Building 771 for further treatment if contaminated with above-discard amounts of plutonium.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **INW243.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                     |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5122                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | WP-INW243.001     | 73.8        |
| 55-gal Drum Dir Ld w/o Liner | WP-INW243.001     | 1.0         |
| <b>Shipped Total</b>         |                   | <b>74.9</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.37                                 |
| Aluminum-based Metals/Alloys | 0.01                                 |
| Other Metals                 | 11.00                                |
| Other Inorganic Materials    | 163.61                               |
| Cellulosics                  | 0.58                                 |
| Rubber                       | 0.10                                 |
| Plastics                     | 23.80                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.88E-01                                   |
| Np-237  | 1.55E-06                                   |
| Pu-238  | 1.37E-01                                   |
| Pu-239  | 3.16E+00                                   |
| Pu-240  | 7.07E-01                                   |
| Pu-241  | 7.68E+00                                   |
| Pu-242  | 9.10E-05                                   |
| Th-229  | 1.55E-08                                   |
| Th-230  | 1.15E-09                                   |
| Th-232  | 1.29E-17                                   |
| U-233   | 3.30E-05                                   |
| U-234   | 2.65E-05                                   |
| U-235   | 5.99E-06                                   |
| U-236   | 1.05E-07                                   |
| U-238   | 4.24E-06                                   |

## Haz. Waste No(s).

D005, D008, D009,  
D022, F001, F002,  
F005

## TRUCON Code(s)

118/218, 125/225

## Waste Stream Description

N/A

Waste Stream ID: **IN-W243.276**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                             |                                       |                 |                   |            |          |    |
|-------------|-----------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory   | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | RH |
| Source Cat. | Analytical Laboratory Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | GLASS: RH-Cert.-repack      | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.5        | 0.0        | 2.5        |
| <b>Current Form Total</b>   | <b>2.5</b> | <b>0.0</b> | <b>2.5</b> |

| Final Form Volumes                          |            |            |            |
|---|------------|------------|------------|
| Container Type                              | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 3.6        | 0.0        | 3.6        |
| <b>Final Form Total</b>                     | <b>3.6</b> | <b>0.0</b> | <b>3.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 1.15                                 |
| Other Inorganic Materials       | 208.53                               |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.76                                 |
| Plastics                        | 22.60                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.93E-01                                   |
| Np-237  | 1.70E-06                                   |
| Pu-238  | 6.54E-02                                   |
| Pu-239  | 2.14E+00                                   |
| Pu-240  | 4.84E-01                                   |
| Pu-241  | 5.42E+00                                   |
| Pu-242  | 3.49E-05                                   |
| Th-229  | 2.94E-14                                   |
| Th-230  | 2.97E-10                                   |
| Th-232  | 1.15E-16                                   |
| U-233   | 5.72E-11                                   |
| U-234   | 3.59E-06                                   |
| U-235   | 6.55E-07                                   |
| U-236   | 2.59E-07                                   |
| U-238   | 4.26E-08                                   |

## Haz. Waste No(s).

D008, D029, F001, F002, F003, F005

## TRUCON Code(s)

118/218

## Waste Stream Description

This waste stream, generated at the Rocky Flats Plant, consists of glass sample vials, bottles, lead-taped sample vials, ion exchange columns, dissolver ports, laboratory glassware such as pyrex flasks and beakers, glovebox windows (glass, plexiglass, leaded glass), and crushed and ground glass. The waste includes limited amounts of other non-combustibles such as metals, and limited amounts of combustible wastes. No sludges should be present although some glass vials may contain limited amounts of free liquids. No explosive, pyrophoric, or corrosive materials should be in the waste. Drums may contain respirable crushed glass fines or free liquids. The glass may be packaged with some variation depending on if it is whole, broken to pieces, or crushed or ground. Whole or broken glass may be packaged in 1-gallon PE bottles, in 13-inch high by 15.5-inch diameter Fibre-Paks (either loose or inside plastic bags inside the Fibre-Pak), or double-packed in plastic bags, with the outside of the outer bag taped for protection against sharp edges. Glassware such as sample vials may be taped together before packaging. Nonline generated glassware, light bulbs, and fluorescent tubes are usually crushed or ground and placed directly into a prepared 55-gallon drum. Drums were packed according to the usual pre-1972 and post-1972 procedures.

Each drum was assayed. Since 1972, the drums were also processed according to inspection and sealing procedures; and since 1982, vermiculite instead of Oil-Dri was placed on the top of the outer sealed PE drum bag. A small number of the drums are lead-lined. Also, Oil-Dri was added to the glass waste if moisture was present.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-W243.277**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                             |                                       |                 |                   |            |          |    |
|-------------|-----------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory   | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | RH |
| Source Cat. | Analytical Laboratory Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | GLASS: RH-Uncert            | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.8        | 0.0        | 0.8        |
| <b>Current Form Total</b>   | <b>0.8</b> | <b>0.0</b> | <b>0.8</b> |

| Final Form Volumes                          |            |            |            |
|---|------------|------------|------------|
| Container Type                              | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 1.8        | 0.0        | 1.8        |
| <b>Final Form Total</b>                     | <b>1.8</b> | <b>0.0</b> | <b>1.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 2500.00                              |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.57E+00                                   |
| Np-237  | 6.80E-06                                   |
| Pu-238  | 2.62E-01                                   |
| Pu-239  | 8.54E+00                                   |
| Pu-240  | 1.94E+00                                   |
| Pu-241  | 2.17E+01                                   |
| Pu-242  | 1.39E-04                                   |
| Th-229  | 1.18E-13                                   |
| Th-230  | 1.19E-09                                   |
| Th-232  | 4.60E-16                                   |
| U-233   | 2.29E-10                                   |
| U-234   | 1.44E-05                                   |
| U-235   | 2.62E-06                                   |
| U-236   | 1.03E-06                                   |
| U-238   | 1.70E-07                                   |

## Haz. Waste No(s).

D008, D029, F001, F002, F003, F005

No TRUCON Codes Provided

## Waste Stream Description

This waste stream, generated at the Rocky Flats Plant, consists of glass sample vials, bottles, lead-taped sample vials, ion exchange columns, dissolver ports, laboratory glassware such as pyrex flasks and beakers, glovebox windows (glass, plexiglass, leaded glass), and crushed and ground glass. The waste includes limited amounts of other non-combustibles such as metals, and limited amounts of combustible wastes. No sludges should be present although some glass vials may contain limited amounts of free liquids. No explosive, pyrophoric, or corrosive materials should be in the waste. Drums may contain respirable crushed glass fines or free liquids. The glass may be packaged with some variation depending on if it is whole, broken to pieces, or crushed or ground. Whole or broken glass may be packaged in 1-gallon PE bottles, in 13-inch high by 15.5-inch diameter Fibre-Paks (either loose or inside plastic bags inside the Fibre-Pak), or double-packed in plastic bags, with the outside of the outer bag taped for protection against sharp edges. Glassware such as sample vials may be taped together before packaging. Nonline generated glassware, light bulbs, and fluorescent tubes are usually crushed or ground and placed directly into a prepared 55-gallon drum. Drums were packed according to the usual pre-1972 and post-1972 procedures.

Each drum was assayed. Since 1972, the drums were also processed according to inspection and sealing procedures; and since 1982, vermiculite instead of Oil-Dri was placed on the top of the outer sealed PE drum bag. A small number of the drums are lead-lined. Also, Oil-Dri was added to the glass waste if moisture was present.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **INW247.001R1-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                     |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5122                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |              |
|------------------------------|-------------------|--------------|
| Container Type               | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner  | WP-INW247.001R1   | 112.7        |
| 55-gal Drum Dir Ld w/o Liner | WP-INW247.001R1   | 4.2          |
| <b>Shipped Total</b>         |                   | <b>116.9</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.15                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.01                                 |
| Other Inorganic Materials    | 233.57                               |
| Cellulosics                  | 19.55                                |
| Rubber                       | 0.00                                 |
| Plastics                     | 1.28                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.32E-01                                   |
| Np-237  | 1.13E-06                                   |
| Pu-238  | 2.09E-01                                   |
| Pu-239  | 3.55E+00                                   |
| Pu-240  | 8.10E-01                                   |
| Pu-241  | 8.98E+00                                   |
| Pu-242  | 6.77E-05                                   |
| Th-229  | 3.02E-08                                   |
| Th-230  | 7.74E-11                                   |
| Th-232  | 1.48E-17                                   |
| U-233   | 6.45E-05                                   |
| U-234   | 3.22E-06                                   |
| U-235   | 6.88E-08                                   |
| U-236   | 1.20E-07                                   |
| U-238   | 5.11E-14                                   |

## Haz. Waste No(s).

D008, F001, F002

## TRUCON Code(s)

118/218, 125/225

## Waste Stream Description

N/A



Waste Stream ID: **INW252.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                 |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5311                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | WP-INW252.001     | 60.9        |
| <b>Shipped Total</b>        |                   | <b>60.9</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 207.33                               |
| Other Inorganic Materials    | 4.03                                 |
| Cellulosics                  | 0.10                                 |
| Rubber                       | 208.17                               |
| Plastics                     | 3.38                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.64E-01                                   |
| Np-237  | 1.05E-06                                   |
| Pu-238  | 1.98E-01                                   |
| Pu-239  | 4.95E+00                                   |
| Pu-240  | 1.12E+00                                   |
| Pu-241  | 1.74E+01                                   |
| Pu-242  | 1.12E-04                                   |
| Th-229  | 1.07E-15                                   |
| Th-230  | 4.96E-10                                   |
| Th-232  | 1.32E-17                                   |
| U-233   | 8.67E-12                                   |
| U-234   | 1.49E-05                                   |
| U-235   | 3.71E-06                                   |
| U-236   | 1.33E-07                                   |
| U-238   | 6.75E-14                                   |

## Haz. Waste No(s).

D008, D022, F001, F002, F003, F005, F006, F007, F009

## TRUCON Code(s)

123/223

## Waste Stream Description

N/A

Waste Stream ID: **IN-W252.282**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                          | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | RH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | LEADED RUBBER GLOVES AND APRONS: RH-Cert-repack    |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 12.1        | 0.0        | 12.1        |
| <b>Current Form Total</b>   | <b>12.1</b> | <b>0.0</b> | <b>12.1</b> |

| Final Form Volumes                          |             |            |             |
|---|-------------|------------|-------------|
| Container Type                              | Stored      | Proj.      | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 17.8        | 0.0        | 17.8        |
| <b>Final Form Total</b>                     | <b>17.8</b> | <b>0.0</b> | <b>17.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 13.40                                |
| Cellulosics                     | 2.60                                 |
| Rubber                          | 286.00                               |
| Plastics                        | 8.40                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.08E+00                                   |
| Np-237  | 4.28E-06                                   |
| Pu-238  | 2.22E-01                                   |
| Pu-239  | 7.25E+00                                   |
| Pu-240  | 1.64E+00                                   |
| Pu-241  | 1.84E+01                                   |
| Pu-242  | 1.18E-04                                   |
| Th-229  | 6.70E-14                                   |
| Th-230  | 1.01E-09                                   |
| Th-232  | 3.89E-16                                   |
| U-233   | 1.36E-10                                   |
| U-234   | 1.22E-05                                   |
| U-235   | 1.29E-07                                   |
| U-236   | 8.74E-07                                   |
| U-238   | 3.20E-13                                   |

## Haz. Waste No(s).

D008, D022, D028, D029, F001, F002, F003, F005

## TRUCON Code(s)

123/223

## Waste Stream Description

This waste comes from the Rocky Flats Plant and consists of leaded rubber gloves and aprons. A limited amount of unleaded gloves, lead bricks, and lead sheeting may also be present. Content Code 463 was replaced by Content Code 339 in 1973. Waste is packaged in standard RFP fashion. Lead linings are present on some drums.

Waste Stream ID: **IN-W254.1045**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                       | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | RH |
| Source Cat. | Materials Production/Recovery Effluents         | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | LEADED RUBBER GLOVES AND APRONS: RH-Cert-repack |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.8        | 0.0        | 0.8        |
| <b>Current Form Total</b>   | <b>0.8</b> | <b>0.0</b> | <b>0.8</b> |

| Final Form Volumes                          |            |            |            |
|---|------------|------------|------------|
| Container Type                              | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 1.8        | 0.0        | 1.8        |
| <b>Final Form Total</b>                     | <b>1.8</b> | <b>0.0</b> | <b>1.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 178.10                               |
| Other Inorganic Materials       | 20.10                                |
| Cellulosics                     | 3.80                                 |
| Rubber                          | 185.70                               |
| Plastics                        | 11.40                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.98E-01                                   |
| Np-237  | 1.67E-06                                   |
| Pu-238  | 1.33E-01                                   |
| Pu-239  | 4.33E+00                                   |
| Pu-240  | 9.81E-01                                   |
| Pu-241  | 1.10E+01                                   |
| Pu-242  | 7.07E-05                                   |
| Th-229  | 2.05E-14                                   |
| Th-230  | 6.04E-10                                   |
| Th-232  | 2.33E-16                                   |
| U-233   | 4.66E-11                                   |
| U-234   | 7.28E-06                                   |
| U-235   | 7.68E-08                                   |
| U-236   | 5.24E-07                                   |
| U-238   | 1.92E-13                                   |

## Haz. Waste No(s).

D008, F001, F002

## TRUCON Code(s)

123/223

## Waste Stream Description

This waste comes from the Rocky Flats Plant and consists of leaded rubber gloves and aprons. A limited amount of unleaded gloves, lead bricks, and lead sheeting may also be present. Content Code 463 was replaced by Content Code 339 in 1973. Waste is packaged in standard RFP fashion. Lead linings are present on some drums.

Waste Stream ID: **IN-W263.520**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                 |                                       |            |          |    |
|-------------|---------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Soils           | Waste Matrix Code                     | S4100      | Handling | CH |
| Source Cat. | Remediation/D&D Waste     | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | CONTAMINATED SOIL         |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |              |            |              |
|---------------------------|--------------|------------|--------------|
| Container Type            | Stored       | Proj.      | Total        |
| Box - Misc                | 123.6        | 0.0        | 123.6        |
| <b>Current Form Total</b> | <b>123.6</b> | <b>0.0</b> | <b>123.6</b> |

| Final Form Volumes                  |              |            |              |
|-------------------------------------|--------------|------------|--------------|
| Container Type                      | Stored       | Proj.      | Total        |
| SWB Dir Ld w/ Liner                 | 45.4         | 0.0        | 45.4         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 234.7        | 0.0        | 234.7        |
| <b>Final Form Total</b>             | <b>280.1</b> | <b>0.0</b> | <b>280.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.09                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 5.67                                 |
| Cellulosics                     | 16.82                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 542.81                               |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 207.30                               |
| Packaging Material, Plastic     | 13.69                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.81E-04                                   |
| Np-237  | 5.71E-10                                   |
| Pu-238  | 1.28E+00                                   |
| Pu-239  | 6.79E-02                                   |
| Pu-240  | 1.08E-04                                   |
| Pu-241  | 4.35E-03                                   |
| Pu-242  | 9.44E-08                                   |
| Th-229  | 6.20E-18                                   |
| Th-230  | 5.15E-09                                   |
| Th-232  | 2.28E-20                                   |
| U-233   | 1.50E-14                                   |
| U-234   | 6.59E-05                                   |
| U-235   | 1.14E-09                                   |
| U-236   | 5.44E-11                                   |
| U-238   | 2.42E-16                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D010, D011**No TRUCON  
Codes Provided**

## Waste Stream Description

This waste, generated at Mound Laboratories, consists of soil, including small rocks and pebbles, generated from cleanup of a leak. All soil waste was dry when packaged. A few waste boxes also include picks, shovels, metal cans, rubber gloves, booties, respirators, plastic, and possibly an air hammer and chisel. Soils waste was packaged in small, plastic lined plywood boxes (42 x 20 x 39 inch) other waste was then placed on top of the soil before the box was sealed. Four of the small boxes were then packaged in a standard larger waste box (4 x 4 x 7 feet) lined with fiberglass-reinforced polyester. Assay was performed using radiochemical analysis on core samples taken from the contaminated area.

Waste Stream ID: **IN-W267.1005**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory               | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | GRIT:Direct Ship                        | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 3.7        | 0.0        | 3.7        |
| <b>Current Form Total</b>   | <b>3.7</b> | <b>0.0</b> | <b>3.7</b> |

| Final Form Volumes                  |             |            |             |
|-------------------------------------|-------------|------------|-------------|
| Container Type                      | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner                 | 1.9         | 0.0        | 1.9         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 9.6         | 0.0        | 9.6         |
| <b>Final Form Total</b>             | <b>11.5</b> | <b>0.0</b> | <b>11.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1.64                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 39.88                                |
| Cellulosics                     | 4.44                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 6.03                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 207.12                               |
| Packaging Material, Plastic     | 13.64                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.03E+00                                   |
| Np-237  | 3.24E-06                                   |
| Pu-238  | 4.30E-01                                   |
| Pu-239  | 1.36E+01                                   |
| Pu-240  | 2.99E+00                                   |
| Pu-241  | 2.47E+01                                   |
| Pu-242  | 7.02E-04                                   |
| Th-229  | 3.52E-14                                   |
| Th-230  | 1.74E-09                                   |
| Th-232  | 6.34E-16                                   |
| U-233   | 8.49E-11                                   |
| U-234   | 2.22E-05                                   |
| U-235   | 2.28E-07                                   |
| U-236   | 1.51E-06                                   |
| U-238   | 1.80E-12                                   |

## Haz. Waste No(s).

D007

No TRUCON Codes Provided

## Waste Stream Description

This waste stream, generated at the Rocky Flats Plant, consists of grit such as aluminum oxide and iron fines and pellets used in grit-blasting operations and spent silica gel desiccant.

The only organic material is the packaging, which averages about 5 lb/ft<sup>3</sup>, excluding the drum liner. No sludges or free liquids should be present. No explosive or pyrophoric materials should be in this waste.

The material is contained in 55-gallon drums. Inside the drums, the grit may be contained in PVC or PE bags in Vollrath stainless steel cans, or in 1-gallon PE bottles inside PVC and PE bags. Silica gel is placed directly into the prepared drums. Drums were prepared and inspected according to pre- and post-1972 procedures.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **INW276.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                 |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5126                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | WP-INW276.001     | 10.2        |
| <b>Shipped Total</b>        |                   | <b>10.2</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 329.28                               |
| Cellulosics                  | 4.61                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 3.73                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.32E-01                                   |
| Np-237  | 1.37E-06                                   |
| Pu-238  | 2.26E-01                                   |
| Pu-239  | 3.12E+00                                   |
| Pu-240  | 7.11E-01                                   |
| Pu-241  | 7.96E+00                                   |
| Pu-242  | 6.42E-05                                   |
| Th-229  | 6.91E-15                                   |
| Th-230  | 2.45E-10                                   |
| Th-232  | 4.22E-17                                   |
| U-233   | 2.52E-11                                   |
| U-234   | 5.98E-06                                   |
| U-235   | 5.33E-08                                   |
| U-236   | 1.90E-07                                   |
| U-238   | 8.72E-14                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

115/215

## Waste Stream Description

N/A

Waste Stream ID: **INW276.002-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                 |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5126                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | WP-INW276.002     | 16.0        |
| <b>Shipped Total</b>        |                   | <b>16.0</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 320.62                               |
| Cellulosics                  | 8.74                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 0.00                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.34E-01                                   |
| Np-237  | 1.24E-06                                   |
| Pu-238  | 2.17E-01                                   |
| Pu-239  | 2.98E+00                                   |
| Pu-240  | 6.79E-01                                   |
| Pu-241  | 7.95E+00                                   |
| Pu-242  | 6.13E-05                                   |
| Th-229  | 3.42E-08                                   |
| Th-230  | 1.99E-10                                   |
| Th-232  | 3.18E-17                                   |
| U-233   | 4.56E-05                                   |
| U-234   | 5.28E-06                                   |
| U-235   | 7.10E-08                                   |
| U-236   | 1.61E-07                                   |
| U-238   | 7.40E-14                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

115/215

## Waste Stream Description

N/A

Waste Stream ID: **INW276.003-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                 |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5126                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |              |
|------------------------------|-------------------|--------------|
| Container Type               | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner  | WP-INW276.003     | 182.6        |
| 55-gal Drum Dir Ld w/o Liner | WP-INW276.003     | 4.0          |
| <b>Shipped Total</b>         |                   | <b>186.6</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.04                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.04                                 |
| Other Inorganic Materials    | 329.25                               |
| Cellulosics                  | 8.62                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 1.35                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.69E+00                                   |
| Np-237  | 3.01E-06                                   |
| Pu-238  | 6.91E-01                                   |
| Pu-239  | 9.25E+00                                   |
| Pu-240  | 2.11E+00                                   |
| Pu-241  | 2.76E+01                                   |
| Pu-242  | 1.96E-04                                   |
| Th-229  | 1.57E-07                                   |
| Th-230  | 3.77E-10                                   |
| Th-232  | 5.56E-17                                   |
| U-233   | 2.79E-04                                   |
| U-234   | 1.29E-05                                   |
| U-235   | 2.65E-07                                   |
| U-236   | 3.75E-07                                   |
| U-238   | 6.00E-09                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

115/215, 125/225

## Waste Stream Description

N/A



Waste Stream ID: **INW276.004-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                 |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5126                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | WP-INW276.004     | 42.4        |
| 55-gal Drum Dir Ld w/o Liner | WP-INW276.004     | 4.4         |
| <b>Shipped Total</b>         |                   | <b>46.8</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.25                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.17                                 |
| Other Inorganic Materials    | 327.99                               |
| Cellulosics                  | 2.14                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 3.07                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.64E+00                                   |
| Np-237  | 2.97E-06                                   |
| Pu-238  | 5.76E-01                                   |
| Pu-239  | 7.84E+00                                   |
| Pu-240  | 1.79E+00                                   |
| Pu-241  | 2.30E+01                                   |
| Pu-242  | 1.63E-04                                   |
| Th-229  | 5.45E-07                                   |
| Th-230  | 4.32E-10                                   |
| Th-232  | 4.71E-17                                   |
| U-233   | 9.69E-04                                   |
| U-234   | 1.30E-05                                   |
| U-235   | 6.52E-07                                   |
| U-236   | 3.18E-07                                   |
| U-238   | 1.48E-13                                   |

## Haz. Waste No(s).

D008, D029, D040,  
F001, F002, F005

## TRUCON Code(s)

115/215, 125/225

## Waste Stream Description

N/A

Waste Stream ID: **IN-W294.343**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                     |                                       |            |          |    |
|-------------|--|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                          | Final Waste Form      | Uncategorized Metal | Waste Matrix Code                     | S5110      | Handling | RH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | LEACHED NONSPECIAL SOURCE METAL:RH-Cert-repack     |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 6.0        | 0.0        | 6.0        |
| <b>Current Form Total</b>   | <b>6.0</b> | <b>0.0</b> | <b>6.0</b> |

| Final Form Volumes                          |            |            |            |
|---|------------|------------|------------|
| Container Type                              | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 8.9        | 0.0        | 8.9        |
| <b>Final Form Total</b>                     | <b>8.9</b> | <b>0.0</b> | <b>8.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 113.00                               |
| Aluminum-based Metals/Alloys    | 6.70                                 |
| Other Metals                    | 85.10                                |
| Other Inorganic Materials       | 22.10                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 11.40                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.34E-01                                   |
| Np-237  | 1.65E-06                                   |
| Pu-238  | 9.63E-02                                   |
| Pu-239  | 3.15E+00                                   |
| Pu-240  | 7.13E-01                                   |
| Pu-241  | 7.99E+00                                   |
| Pu-242  | 5.14E-05                                   |
| Th-229  | 2.44E-14                                   |
| Th-230  | 4.38E-10                                   |
| Th-232  | 1.69E-16                                   |
| U-233   | 5.07E-11                                   |
| U-234   | 5.28E-06                                   |
| U-235   | 2.08E-06                                   |
| U-236   | 3.81E-07                                   |
| U-238   | 1.40E-13                                   |

## Haz. Waste No(s).

D008, D022, F001, F002, F005

## TRUCON Code(s)

117/217

## Waste Stream Description

The waste comes from Rocky Flats Plant. It consists of the smaller pieces of the waste described under Content Code 480 that have been washed with hot water to recover plutonium. The waste is packaged in standard RFP fashion. Sharp metal edges are taped before packaging. Some lead-lined containers are included.

Waste Stream ID: **INW296.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                          |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|--------------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Lead/Cadmium Metal Waste | Waste Matrix Code | S5112                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related          | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                          |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | WP-INW296.001     | 93.2        |
| 55-gal Drum Dir Ld w/o Liner | WP-INW296.001     | 4.6         |
| <b>Shipped Total</b>         |                   | <b>97.8</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 5.43                                 |
| Aluminum-based Metals/Alloys | 0.39                                 |
| Other Metals                 | 220.74                               |
| Other Inorganic Materials    | 11.39                                |
| Cellulosics                  | 0.93                                 |
| Rubber                       | 1.78                                 |
| Plastics                     | 4.31                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.56E+00                                   |
| Np-237  | 2.44E-06                                   |
| Pu-238  | 2.94E-01                                   |
| Pu-239  | 5.25E+00                                   |
| Pu-240  | 1.19E+00                                   |
| Pu-241  | 1.34E+01                                   |
| Pu-242  | 1.13E-04                                   |
| Th-229  | 4.86E-08                                   |
| Th-230  | 4.05E-10                                   |
| Th-232  | 2.18E-17                                   |
| U-233   | 1.04E-04                                   |
| U-234   | 1.11E-05                                   |
| U-235   | 1.58E-06                                   |
| U-236   | 1.76E-07                                   |
| U-238   | 4.05E-06                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D011, D028,  
F001, F002, F003,  
F005, F006, F007,  
F009

## TRUCON Code(s)

117/217, 125/225

## Waste Stream Description

N/A

Waste Stream ID: **IN-W296.330**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                     |                                       |            |          |    |
|-------------|--|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                          | Final Waste Form      | Uncategorized Metal | Waste Matrix Code                     | S5110      | Handling | RH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | NONSPECIAL SOURCE METAL:RH-Cert-repack             |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 8.7        | 0.0        | 8.7        |
| <b>Current Form Total</b>   | <b>8.7</b> | <b>0.0</b> | <b>8.7</b> |

| Final Form Volumes                          |             |            |             |
|---|-------------|------------|-------------|
| Container Type                              | Stored      | Proj.      | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 12.5        | 0.0        | 12.5        |
| <b>Final Form Total</b>                     | <b>12.5</b> | <b>0.0</b> | <b>12.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 40.90                                |
| Aluminum-based Metals/Alloys    | 2.70                                 |
| Other Metals                    | 111.60                               |
| Other Inorganic Materials       | 13.10                                |
| Cellulosics                     | 2.70                                 |
| Rubber                          | 1.20                                 |
| Plastics                        | 18.30                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.08E-01                                   |
| Np-237  | 3.50E-06                                   |
| Pu-238  | 2.23E-02                                   |
| Pu-239  | 7.28E-01                                   |
| Pu-240  | 1.65E-01                                   |
| Pu-241  | 1.85E+00                                   |
| Pu-242  | 1.19E-05                                   |
| Th-229  | 2.09E-13                                   |
| Th-230  | 1.01E-10                                   |
| Th-232  | 3.91E-17                                   |
| U-233   | 2.53E-10                                   |
| U-234   | 1.22E-06                                   |
| U-235   | 1.25E-07                                   |
| U-236   | 8.80E-08                                   |
| U-238   | 3.23E-14                                   |

## Haz. Waste No(s).

D008, D028, D029,  
F001, F002, F003,  
F005

## TRUCON Code(s)

117/217

## Waste Stream Description

The waste comes from Rocky Flats Plant. It consists of the nonline- and line-generated wastes. The waste may be in the form of gloveboxes, glovebox windows, furnaces, lathes, drill presses, ducting, piping, angle iron, tanks, downdraft tables, part carriers, respirator filters, ultrasonic cleaners, control panels, electronic instrumentation, vacuum sweepers, pumps, motors, railing, stairs, metal racks and trays, hotplates, empty metal produce and paint cans, carts, power tools (saws, drills, etc.) hand tools (wrenches hammers, saws, chisels, gauges, etc.), chairs desks, tables, typewriters, filing cabinets, crushed 55-gallon drums, etc. The waste may also include limited amounts of combustible wastes. The waste is packaged in standard RFP fashion. Sharp metal edges are taped before packaging. Some lead lined containers are included.

Waste Stream ID: **IN-W296.331**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                     |                                       |            |          |    |
|-------------|--|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                          | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code                     | S5112      | Handling | RH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | NONSPECIAL SOURCE METAL:RH-Uncert                  |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 8.7        | 0.0        | 8.7        |
| <b>Current Form Total</b>   | <b>8.7</b> | <b>0.0</b> | <b>8.7</b> |

| Final Form Volumes                          |             |            |             |
|---|-------------|------------|-------------|
| Container Type                              | Stored      | Proj.      | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 12.5        | 0.0        | 12.5        |
| <b>Final Form Total</b>                     | <b>12.5</b> | <b>0.0</b> | <b>12.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 230.79                               |
| Aluminum-based Metals/Alloys    | 1.27                                 |
| Other Metals                    | 10.50                                |
| Other Inorganic Materials       | 0.49                                 |
| Cellulosics                     | 7.19                                 |
| Rubber                          | 0.20                                 |
| Plastics                        | 4.84                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.01                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.63E-01                                   |
| Np-237  | 1.16E-05                                   |
| Pu-238  | 7.44E-02                                   |
| Pu-239  | 2.43E+00                                   |
| Pu-240  | 5.50E-01                                   |
| Pu-241  | 6.18E+00                                   |
| Pu-242  | 3.97E-05                                   |
| Th-229  | 6.94E-13                                   |
| Th-230  | 3.38E-10                                   |
| Th-232  | 1.31E-16                                   |
| U-233   | 8.41E-10                                   |
| U-234   | 4.08E-06                                   |
| U-235   | 4.15E-07                                   |
| U-236   | 2.94E-07                                   |
| U-238   | 1.08E-13                                   |

## Haz. Waste No(s).

D008, D028, D029,  
F001, F002, F003,  
F005

**No TRUCON  
Codes Provided**

## Waste Stream Description

The waste comes from Rocky Flats Plant. It consists of the nonline- and line-generated wastes. The waste may be in the form of gloveboxes, glovebox windows, furnaces, lathes, drill presses, ducting, piping, angle iron, tanks, downdraft tables, part carriers, respirator filters, ultrasonic cleaners, control panels, electronic instrumentation, vacuum sweepers, pumps, motors, railing, stairs, metal racks and trays, hotplates, empty metal produce and paint cans, carts, power tools (saws, drills, etc.) hand tools (wrenches hammers, saws, chisels, gauges, etc.), chairs desks, tables, typewriters, filing cabinets, crushed 55-gallon drums, etc. The waste may also include limited amounts of combustible wastes. The waste is packaged in standard RFP fashion. Sharp metal edges are taped before packaging. Some lead lined containers are included.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-W298.318**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory               | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | RH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | TANTALUM:RH-Cert-repack                 | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 5.6        | 0.0        | 5.6        |
| <b>Current Form Total</b>   | <b>5.6</b> | <b>0.0</b> | <b>5.6</b> |

| Final Form Volumes                          |            |            |            |
|---|------------|------------|------------|
| Container Type                              | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 8.0        | 0.0        | 8.0        |
| <b>Final Form Total</b>                     | <b>8.0</b> | <b>0.0</b> | <b>8.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 129.00                               |
| Aluminum-based Metals/Alloys    | 4.40                                 |
| Other Metals                    | 28.40                                |
| Other Inorganic Materials       | 14.60                                |
| Cellulosics                     | 9.60                                 |
| Rubber                          | 1.00                                 |
| Plastics                        | 9.50                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.55E+00                                   |
| Np-237  | 1.16E-05                                   |
| Pu-238  | 3.69E-01                                   |
| Pu-239  | 1.20E+01                                   |
| Pu-240  | 2.73E+00                                   |
| Pu-241  | 3.06E+01                                   |
| Pu-242  | 1.97E-04                                   |
| Th-229  | 2.09E-13                                   |
| Th-230  | 1.68E-09                                   |
| Th-232  | 6.47E-16                                   |
| U-233   | 4.00E-10                                   |
| U-234   | 2.02E-05                                   |
| U-235   | 2.13E-07                                   |
| U-236   | 1.46E-06                                   |
| U-238   | 5.35E-13                                   |

## Haz. Waste No(s).

D008, F001, F002

## TRUCON Code(s)

117/217

## Waste Stream Description

This waste comes from the Rocky Flats Plant. It consists of used tantalum crucibles, funnels, funnel inserts, and pour-rods. This waste is packaged in standard RFP fashion. Sharp metal edges are taped before packaging. Other metals may include tungsten, platinum, and lead. Some lead-lined containers are included.

Waste Stream ID: **IN-W315.601**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                       |                                       |            |          |    |
|-------------|---------------------------|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3143      | Handling | CH |
| Source Cat. | Other/Multiple Sources    | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | EVAPORATOR SALTS          |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 11.0        | 0.0        | 11.0        |
| Box - Misc                  | 3.2         | 0.0        | 3.2         |
| <b>Current Form Total</b>   | <b>14.2</b> | <b>0.0</b> | <b>14.2</b> |

| Final Form Volumes                  |             |            |             |
|-------------------------------------|-------------|------------|-------------|
| Container Type                      | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner                 | 5.7         | 0.0        | 5.7         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 28.7        | 0.0        | 28.7        |
| <b>Final Form Total</b>             | <b>34.4</b> | <b>0.0</b> | <b>34.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 4.69                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 2.72                                 |
| Other Inorganic Materials       | 7.70                                 |
| Cellulosics                     | 69.92                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.53                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 207.12                               |
| Packaging Material, Plastic     | 13.64                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.32E+01                                   |
| Np-237  | 3.52E-04                                   |
| Pu-238  | 2.54E-02                                   |
| Pu-239  | 8.23E-01                                   |
| Pu-240  | 1.87E-01                                   |
| Pu-241  | 2.19E+00                                   |
| Pu-242  | 1.34E-05                                   |
| Th-229  | 6.94E-12                                   |
| Th-230  | 1.03E-10                                   |
| Th-232  | 3.95E-17                                   |
| U-233   | 1.30E-08                                   |
| U-234   | 1.31E-06                                   |
| U-235   | 1.38E-08                                   |
| U-236   | 9.42E-08                                   |
| U-238   | 3.44E-14                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

Waste is generated at Rocky Flats Plant from aqueous waste treatment in building 774. Waste consists of a salt residue generated from concentrating and drying liquid waste from the solar evaporation ponds. The approximate chemical makeup of the salt is 60% sodium nitrate, 30% potassium nitrate, and 10% miscellaneous. Limited amounts of other wastes such as surgeons' gloves, paper, rags, and metal may be found in the waste drums. Portland cement was added to damp or wet salt when necessary.

The majority of salt drums in storage at the INEL should be contaminated with <10 nCi/g TRU. Salt waste is no longer shipped to the INEL.

Since 1972, drums have been inspected for free liquids, proper packaging, and use of the proper content code. After inspection, approximately 1 to 2 quarts of Oil-Dri was placed on top of the outer sealed polyethylene drum bag.

Waste Stream ID: **IN-W319.584**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory               | Final Waste Form                      | Combustible     | Waste Matrix Code | S5390      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | LEACHED RESIN:Direct Ship               | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.2        | 0.0        | 1.2        |
| <b>Current Form Total</b>   | <b>1.2</b> | <b>0.0</b> | <b>1.2</b> |

| Final Form Volumes                   |            |            |            |
|--------------------------------------|------------|------------|------------|
| Container Type                       | Stored     | Proj.      | Total      |
| TDOP w/ 10 - 55-gal Drums w/o Liners | 4.8        | 0.0        | 4.8        |
| <b>Final Form Total</b>              | <b>4.8</b> | <b>0.0</b> | <b>4.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 8.15                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 10.48                                |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 217.70                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.80E-01                                   |
| Np-237  | 1.20E-06                                   |
| Pu-238  | 1.59E-01                                   |
| Pu-239  | 5.02E+00                                   |
| Pu-240  | 1.11E+00                                   |
| Pu-241  | 9.13E+00                                   |
| Pu-242  | 2.92E-04                                   |
| Th-229  | 1.30E-14                                   |
| Th-230  | 6.42E-10                                   |
| Th-232  | 2.35E-16                                   |
| U-233   | 3.14E-11                                   |
| U-234   | 8.22E-06                                   |
| U-235   | 8.41E-08                                   |
| U-236   | 5.59E-07                                   |
| U-238   | 7.49E-13                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste, generated at the Rocky Flats Plant, consists of anionic and cationic exchange resins used in the purification and recovery of plutonium and americium, respectively. It is believed that the resins were Content Code 430 resins that were processed by leaching to recover plutonium. Content code was used during 1972 only.



Waste Stream ID: **IN-W321.1023**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory               | Final Waste Form      | Combustible     | Waste Matrix Code                     | S5390      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | UNLEACHED ION COLUMN RESIN:Direct Ship  |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 6.0        | 0.0        | 6.0        |
| <b>Current Form Total</b>   | <b>6.0</b> | <b>0.0</b> | <b>6.0</b> |

| Final Form Volumes                   |             |            |             |
|--------------------------------------|-------------|------------|-------------|
| Container Type                       | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner                  | 1.9         | 0.0        | 1.9         |
| TDOP w/ 10 - 55-gal Drums w/o Liners | 9.6         | 0.0        | 9.6         |
| <b>Final Form Total</b>              | <b>11.5</b> | <b>0.0</b> | <b>11.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 14.54                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 18.70                                |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 207.12                               |
| Packaging Material, Plastic     | 0.20                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.38E+00                                   |
| Np-237  | 4.33E-06                                   |
| Pu-238  | 5.74E-01                                   |
| Pu-239  | 1.82E+01                                   |
| Pu-240  | 4.01E+00                                   |
| Pu-241  | 3.30E+01                                   |
| Pu-242  | 5.90E-04                                   |
| Th-229  | 4.71E-14                                   |
| Th-230  | 2.32E-09                                   |
| Th-232  | 8.50E-16                                   |
| U-233   | 1.14E-10                                   |
| U-234   | 2.97E-05                                   |
| U-235   | 3.05E-07                                   |
| U-236   | 2.02E-06                                   |
| U-238   | 1.51E-12                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste, generated at the Rocky Flats Plant, consists of anionic and cationic exchange resins used in the purification and recovery of plutonium and americium, respectively. The anionic resins were DOWEX 1-X4 and the cationic resins were DOWEX 50W-X8, both being polystyrene-divinylbenzene copolymers.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-W322.851**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                     |                                       |            |          |    |
|-------------|---------------------------|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code                     | S5121      | Handling | CH |
| Source Cat. | Other/Multiple Sources    | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SAMPLE FUEL:Direct Ship   |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Current Form Total</b>   | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

| Final Form Volumes                |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>           | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 139.10                               |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 211.10                               |
| Packaging Material, Plastic     | 16.30                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-239  | 4.83E+00                                   |
| Pu-240  | 9.98E-01                                   |
| Th-232  | 2.11E-16                                   |
| U-235   | 1.31E-04                                   |
| U-236   | 5.04E-07                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream was generated at the INEL. These wastes include actinide neutron sources, a radium needle, small vials of fuel, and metal containers of experimental fuel capsules.

The organic content is less than 14 lb/ft<sup>3</sup>. Combustibles, including packaging, may exceed 25 volume percent. The levels of dispersible fines should be within WIPP-WAC limits. No sludges or free liquids should be present. No explosive or pyrophoric materials should be in this waste.

These wastes are packaged three different ways, depending on when the packaging was done. Pu-Be sources packaged in 1975 were placed in a carbon steel pipe, which was cemented and encapsulated into the center of a 55-gallon drum. In 1978, Pu-Be sources were packaged in four 55-gallon drums. Wastes packed in 1980 were wrapped plastic, placed in paraffin lined 15-gallon drums, and then placed in 55-gallon drums.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-W322.952**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                     |                                       |            |          |    |
|-------------|---------------------------|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code                     | S5121      | Handling | CH |
| Source Cat. | Other/Multiple Sources    | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SAMPLE FUEL:Cert-repack   |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.5        | 0.0        | 1.5        |
| <b>Current Form Total</b>   | <b>1.5</b> | <b>0.0</b> | <b>1.5</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.7        | 0.0        | 1.7        |
| <b>Final Form Total</b>     | <b>1.7</b> | <b>0.0</b> | <b>1.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 421.30                               |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-239  | 1.46E+01                                   |
| Pu-240  | 3.03E+00                                   |
| Th-232  | 6.42E-16                                   |
| U-235   | 3.96E-04                                   |
| U-236   | 1.53E-06                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream was generated at the INEL. These wastes include actinide neutron sources, a radium needle, small vials of fuel, and metal containers of experimental fuel capsules.

The organic content is less than 14 lb/ft<sup>3</sup>. Combustibles, including packaging, may exceed 25 volume percent. The levels of dispersible fines should be within WIPP-WAC limits. No sludges or free liquids should be present. No explosive or pyrophoric materials should be in this waste.

These wastes are packaged three different ways, depending on when the packaging was done. Pu-Be sources packaged in 1975 were placed in a carbon steel pipe, which was cemented and encapsulated into the center of a 55-gallon drum. In 1978, Pu-Be sources were packaged in four 55-gallon drums. Wastes packed in 1980 were wrapped plastic, placed in paraffin lined 15-gallon drums, and then placed in 55-gallon drums.

Waste Stream ID: **IN-W323.562**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                   |                       |                 |                                       |            |          |    |
|-------------|-----------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory         | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5440      | Handling | CH |
| Source Cat. | Other/Multiple Sources            | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | COMBUSTIBLE LAB WASTE:Direct Ship |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Current Form Total</b>   | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

| Final Form Volumes                |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>           | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 12.15                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.86                                 |
| Cellulosics                     | 70.39                                |
| Rubber                          | 0.79                                 |
| Plastics                        | 7.03                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 211.10                               |
| Packaging Material, Plastic     | 16.30                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.83E-02                                   |
| Np-237  | 8.91E-08                                   |
| Pu-238  | 6.28E-01                                   |
| Pu-239  | 1.32E-01                                   |
| Pu-241  | 6.79E-01                                   |
| Th-229  | 9.68E-16                                   |
| Th-230  | 2.53E-09                                   |
| U-233   | 2.33E-12                                   |
| U-234   | 3.24E-05                                   |
| U-235   | 5.07E-05                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream was generated at the Argonne National Laboratory-West at the INEL. Most of the waste is organic and combustible materials including paper, wood, PVC and plastic containers and items, rubber gaskets and gloves, leather, rags, towels, Q-tips, tubing, filter media, abrasive media, and metal pieces. Small residuals of moderators and fuel are trapped on the filters. One of the 28 total drums of Content Code 153 waste is stored at the Transuranic Storage Area (TSA) for contact-handled waste. The other 27 drums are stored at the intermediate level transuranic storage facility (ILTSF) for remote handled waste.

The organic content may exceed 14 lb/ft<sup>3</sup>. Combustibles, including packaging, may exceed 25 volume percent. The levels of dispersible fines should be within WIPP-WAC limits. No sludges or free liquids should be present. No explosive or pyrophoric materials should be in this waste.

Individual waste items may be loose or plastic bagged. Combustibles and noncombustibles are segregated to separate waste cans. Each can is weighed and assayed. The inner waste cans are loaded into an outer waste drum, along with a lead shield plug. Assays are done for each can and for the drums.

The waste stream is non-mixed, because the lead is shielding only and not considered part of waste stream.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-W323.951**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                     |                       |                 |                                       |            |          |    |
|-------------|-------------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory           | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5440      | Handling | CH |
| Source Cat. | Other/Multiple Sources              | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | COMBUSTIBLE LAB WASTE:Uncertifiable |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| RH Insert                 | 1.5        | 0.0        | 1.5        |
| <b>Current Form Total</b> | <b>1.5</b> | <b>0.0</b> | <b>1.5</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 1.5        | 0.0        | 1.5        |
| <b>Final Form Total</b>      | <b>1.5</b> | <b>0.0</b> | <b>1.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 12.15                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.86                                 |
| Cellulosics                     | 70.39                                |
| Rubber                          | 0.79                                 |
| Plastics                        | 7.03                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.04E-01                                   |
| Np-237  | 9.56E-07                                   |
| Pu-238  | 6.76E-02                                   |
| Pu-239  | 1.43E+00                                   |
| Pu-241  | 7.30E+00                                   |
| Th-229  | 1.04E-14                                   |
| Th-230  | 2.73E-10                                   |
| U-233   | 2.51E-11                                   |
| U-234   | 3.49E-06                                   |
| U-235   | 5.48E-04                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream was generated at the Argonne National Laboratory-West at the INEL. Most of the waste is organic and combustible materials including paper, wood, PVC and plastic containers and items, rubber gaskets and gloves, leather, rags, towels, Q-tips, tubing, filter media, abrasive media, and metal pieces. Small residuals of moderators and fuel are trapped on the filters. One of the 28 total drums of Content Code 153 waste is stored at the Transuranic Storage Area (TSA) for contact-handled waste. The other 27 drums are stored at the intermediate level transuranic storage facility (ILTSF) for remote handled waste.

The organic content may exceed 14 lb/ft<sup>3</sup>. Combustibles, including packaging, may exceed 25 volume percent. The levels of dispersible fines should be within WIPP-WAC limits. No sludges or free liquids should be present. No explosive or pyrophoric materials should be in this waste.

Individual waste items may be loose or plastic bagged. Combustibles and noncombustibles are segregated to separate waste cans. Each can is weighed and assayed. The inner waste cans are loaded into an outer waste drum, along with a lead shield plug. Assays are done for each can and for the drums.

The waste stream is non-mixed, because the lead is shielding only and not considered part of waste stream.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-W332.661**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                  |                       |                       |                                       |            |          |    |
|-------------|----------------------------------|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory        | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3113      | Handling | CH |
| Source Cat. | Remediation/D&D Waste            | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SOLIDIFIED SOLUTIONS:Direct Ship |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.5        | 0.0        | 1.5        |
| <b>Current Form Total</b>   | <b>1.5</b> | <b>0.0</b> | <b>1.5</b> |

| Final Form Volumes                  |            |            |            |
|-------------------------------------|------------|------------|------------|
| Container Type                      | Stored     | Proj.      | Total      |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 4.8        | 0.0        | 4.8        |
| <b>Final Form Total</b>             | <b>4.8</b> | <b>0.0</b> | <b>4.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 196.75                               |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 199.14                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 217.70                               |
| Packaging Material, Plastic     | 16.10                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-238  | 3.07E+00                                   |
| Pu-239  | 2.49E-02                                   |
| Th-230  | 1.24E-08                                   |
| U-234   | 1.58E-04                                   |
| U-235   | 4.17E-10                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste comes from Battelle Columbus Labs. It is a turco soap decontamination solution (used to decontaminate glove boxes from a Pu lab) which is solidified in plaster-of-paris.

Waste Stream ID: **IN-W337.673**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                 |                       |                     |                                       |            |          |    |
|-------------|---------------------------------|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory       | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code                     | S5121      | Handling | CH |
| Source Cat. | Source Information Not Compiled | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | AMERICIUM SOURCES:Cert-repack   |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>     | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 2150.00                              |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-239  | 1.46E+01                                   |
| Pu-240  | 3.03E+00                                   |
| Th-232  | 6.42E-16                                   |
| U-235   | 3.96E-04                                   |
| U-236   | 1.53E-06                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste was generated at the Idaho National Engineering Laboratory. It consists of an americium neutron source. No other wastes were included in the drum.

The waste was placed in a carbon steel pipe which was centered in the 55-gallon drum. Cement was added to fill the annular space between the pipe and drum and encapsulate the pipe containing the source.

Waste Stream ID: **IN-W337.957**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                 |                       |                     |                                       |            |          |    |
|-------------|---------------------------------|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory       | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code                     | S5121      | Handling | CH |
| Source Cat. | Source Information Not Compiled | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | AMERICIUM SOURCES:Direct Ship   |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes                |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>           | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 139.10                               |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 211.10                               |
| Packaging Material, Plastic     | 16.30                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-239  | 4.83E+00                                   |
| Pu-240  | 9.98E-01                                   |
| Th-232  | 2.11E-16                                   |
| U-235   | 1.31E-04                                   |
| U-236   | 5.04E-07                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste was generated at the Idaho National Engineering Laboratory. It consists of an americium neutron source. No other wastes were included in the drum.

The waste was placed in a carbon steel pipe which was centered in the 55-gallon drum. Cement was added to fill the annular space between the pipe and drum and encapsulate the pipe containing the source.



Waste Stream ID: **IN-W342.652**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                   |                       |                     |                                       |            |          |    |
|-------------|-----------------------------------|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory         | Final Waste Form      | Uncategorized Metal | Waste Matrix Code                     | S3100      | Handling | CH |
| Source Cat. | Source Information Not Compiled   | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | MISCELLANEOUS SOURCES:Direct Ship |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes                |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>           | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 111.26                               |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 211.10                               |
| Packaging Material, Plastic     | 16.30                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.39E+00                                   |
| Np-237  | 1.34E-05                                   |
| Pu-239  | 2.13E-02                                   |
| Pu-240  | 1.06E-17                                   |
| Pu-244  | 1.41E-14                                   |
| Th-229  | 2.63E-13                                   |
| U-233   | 4.94E-10                                   |
| U-235   | 3.57E-10                                   |
| U-236   | 1.54E-24                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

There is no descriptive or constituent information available for this waste, which was generated at ANL-W. Based on engineering judgment, the waste was assigned to "Inorganic Homogeneous Solids." The waste is assumed to be metallic but of a size that is too small to qualify as debris.

Waste Stream ID: **IN-W342.953**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                   |                       |                     |                                       |            |          |    |
|-------------|-----------------------------------|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory         | Final Waste Form      | Uncategorized Metal | Waste Matrix Code                     | S3100      | Handling | CH |
| Source Cat. | Source Information Not Compiled   | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | MISCELLANEOUS SOURCES:Cert-repack |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b>     | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 337.00                               |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.27E+00                                   |
| Np-237  | 4.06E-05                                   |
| Pu-239  | 6.45E-02                                   |
| Pu-240  | 3.22E-17                                   |
| Pu-244  | 4.28E-14                                   |
| Th-229  | 7.99E-13                                   |
| U-233   | 1.50E-09                                   |
| U-235   | 1.08E-09                                   |
| U-236   | 4.67E-24                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

There is no descriptive or constituent information available for this waste, which was generated at ANL-W. Based on engineering judgment, the waste was assigned to "Inorganic Homogeneous Solids." The waste is assumed to be metallic but of a size that is too small to qualify as debris.

Waste Stream ID: **IN-W347.818**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                              |                       |                       |                                       |            |          |    |
|-------------|------------------------------|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory    | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3113      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste     | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | ABSORBED LIQUIDS:Direct Ship |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 22.3        | 0.0        | 22.3        |
| Bin - Misc                  | 45.5        | 0.0        | 45.5        |
| <b>Current Form Total</b>   | <b>67.8</b> | <b>0.0</b> | <b>67.8</b> |

| Final Form Volumes                  |              |            |              |
|-------------------------------------|--------------|------------|--------------|
| Container Type                      | Stored       | Proj.      | Total        |
| SWB Dir Ld w/ Liner                 | 24.6         | 0.0        | 24.6         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 129.3        | 0.0        | 129.3        |
| <b>Final Form Total</b>             | <b>153.9</b> | <b>0.0</b> | <b>153.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 63.97                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 137.01                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 207.45                               |
| Packaging Material, Plastic     | 13.72                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.70E-02                                   |
| Np-237  | 9.51E-08                                   |
| Pu-239  | 4.97E-01                                   |
| Pu-240  | 8.83E-01                                   |
| Th-229  | 1.87E-15                                   |
| Th-230  | 2.33E-14                                   |
| Th-232  | 1.86E-07                                   |
| U-233   | 3.52E-12                                   |
| U-234   | 3.04E-10                                   |
| U-235   | 6.05E-07                                   |
| U-236   | 4.46E-07                                   |
| U-238   | 6.35E-06                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste comes from Argonne National Laboratory-East. It consists of liquids adjusted to pH 10 using NaOH which are then absorbed in vermiculite.

Waste Stream ID: **IN-W348.1012**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                       |                                       |            |          |    |
|-------------|--|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                  | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3117      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents    | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SAND, SLAG, AND CRUCIBLE HEELS:Direct Ship |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 10.0        | 0.0        | 10.0        |
| <b>Current Form Total</b>   | <b>10.0</b> | <b>0.0</b> | <b>10.0</b> |

| Final Form Volumes                  |             |            |             |
|-------------------------------------|-------------|------------|-------------|
| Container Type                      | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner                 | 3.8         | 0.0        | 3.8         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 19.2        | 0.0        | 19.2        |
| <b>Final Form Total</b>             | <b>22.9</b> | <b>0.0</b> | <b>22.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 187.33                               |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 73.10                                |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 207.12                               |
| Packaging Material, Plastic     | 13.64                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.28E+00                                   |
| Np-237  | 4.03E-06                                   |
| Pu-238  | 5.30E-01                                   |
| Pu-239  | 1.68E+01                                   |
| Pu-240  | 3.70E+00                                   |
| Pu-241  | 3.05E+01                                   |
| Pu-242  | 6.67E-04                                   |
| Th-229  | 4.42E-14                                   |
| Th-230  | 2.14E-09                                   |
| Th-232  | 7.85E-16                                   |
| U-233   | 1.06E-10                                   |
| U-234   | 2.74E-05                                   |
| U-235   | 2.82E-07                                   |
| U-236   | 1.87E-06                                   |
| U-238   | 1.71E-12                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste consists of insoluble residue or "heel" generated from processing magnesium oxide sand and pulverized slag and magnesium oxide crucibles to remove above-discard amounts of plutonium. Respirable fines are thought to exceed the WIPP-WAC limits.

The waste stream handling and packaging is as follows: the dried heels were placed into 1/2 and 1-gallon PE bottles. Each bottle was double -bagged out the glovebox in PVC and PE bags. Each bottle was assayed and then placed in prepared 55-gallon drums, about 15-30 bottles per drum. Prior to 1972, the drums were lined with one or two PE bags, which were sealed with tape. Some of these drums may have cardboard liners inside the inner drum bag. After 1972, 90-mil sealed rigid liners were used in addition to one or two PE bags.

Since 1972, drums were inspected (and corrected where needed for free liquids, proper packaging, and proper content code. One to two quarts of Oil-dri was placed on the outer sealed PE drum bag. Starting in february 1982, 3-12 lb of vermiculite was used to fill the space between the outer drum bag and the rigid liner.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-W353.917**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                  |                       |                       |                                       |            |          |    |
|-------------|----------------------------------|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory        | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3113      | Handling | CH |
| Source Cat. | Source Information Not Compiled  | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SOLIDIFIED SOLUTIONS:Cert-repack |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>     | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 461.00                               |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 4.24                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Np-237  | 3.33E-04                                   |
| Pu-239  | 1.20E-01                                   |
| Th-229  | 1.95E-11                                   |
| U-233   | 2.45E-08                                   |
| U-235   | 2.01E-09                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream is from Bettis Atomic Power Laboratory. It consists of a single drum of TRU. No more information is available, but the waste is thought to be solidified inorganic solutions.

Waste Stream ID: **IN-W357.1022**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                                       |                     |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Inorganic Non-Metal | Waste Matrix Code | S3111      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste  | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | FLUID BED ASH:Direct Ship | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.7        | 0.0        | 1.7        |
| <b>Current Form Total</b>   | <b>1.7</b> | <b>0.0</b> | <b>1.7</b> |

| Final Form Volumes                  |            |            |            |
|-------------------------------------|------------|------------|------------|
| Container Type                      | Stored     | Proj.      | Total      |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 4.8        | 0.0        | 4.8        |
| <b>Final Form Total</b>             | <b>4.8</b> | <b>0.0</b> | <b>4.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1.04                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 3.39                                 |
| Cellulosics                     | 5.03                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.78                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 217.70                               |
| Packaging Material, Plastic     | 16.10                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.19E-02                                   |
| Np-237  | 3.75E-08                                   |
| Pu-238  | 4.97E-03                                   |
| Pu-239  | 1.57E-01                                   |
| Pu-240  | 3.46E-02                                   |
| Pu-241  | 2.86E-01                                   |
| Pu-242  | 7.13E-06                                   |
| Th-229  | 4.08E-16                                   |
| Th-230  | 2.00E-11                                   |
| Th-232  | 7.34E-18                                   |
| U-233   | 9.84E-13                                   |
| U-234   | 2.56E-07                                   |
| U-235   | 2.63E-09                                   |
| U-236   | 1.75E-08                                   |
| U-238   | 1.83E-14                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste, generated at the Rocky Flats Plant, consists of ash generated from the experimental pilot and demonstration fluid bed incinerator plants. Combustibles used for experiments were contaminated with low levels of Pu. Ash is packaged in standard RFP drums. Drums were assayed and fissile quantities calculated.

Waste Stream ID: **IN-W358.854**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                   |                       |                     |                                       |            |          |    |
|-------------|-----------------------------------|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory         | Final Waste Form      | Uncategorized Metal | Waste Matrix Code                     | S5420      | Handling | CH |
| Source Cat. | Other/Multiple Sources            | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | PU NEUTRON SOURCES:RH Direct Ship |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes                |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>           | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 31.76                                |
| Aluminum-based Metals/Alloys    | 0.26                                 |
| Other Metals                    | 0.03                                 |
| Other Inorganic Materials       | 0.79                                 |
| Cellulosics                     | 26.71                                |
| Rubber                          | 2.41                                 |
| Plastics                        | 21.43                                |
| Cements                         | 2150.00                              |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 211.10                               |
| Packaging Material, Plastic     | 16.30                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-238  | 2.01E+02                                   |
| Pu-239  | 9.97E-01                                   |
| Pu-240  | 1.92E+00                                   |
| Th-230  | 3.28E-07                                   |
| Th-232  | 1.70E-16                                   |
| U-234   | 6.55E-03                                   |
| U-235   | 1.08E-08                                   |
| U-236   | 6.26E-07                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream was generated at Argonne National Laboratory-West at the INEL. These wastes consist of noncombustible materials including Pu-Be neutron sources (small fuel samples, small sections of moderator, a pu standard, and pu foil), tools, hot cell operating equipment, various containers, and ferrous and nonferrous metals. Some combustible materials may include paper, plastic and PVC containers, rags, Q-tips, string mop heads, and an electrical plug strip and cord.

The organic content is less than 14 lb/ft<sup>3</sup>. Combustibles, including packaging, may exceed 25 volume percent. The levels of dispersible fines should be within WIPP-WAC limits. No sludges or free liquids should be present. No explosive or pyrophoric materials should be in this waste.

These wastes are packaged three different ways, depending on when the packaging was done. Pu-Be sources packaged in 1975 were placed in a carbon steel pipe, which was cemented and encapsulated into the center of a 55-gallon drum. In 1978, Pu-Be sources were packaged in four 55-gallon drums. Wastes packed in 1980 were wrapped plastic, placed in paraffin lined 15 gallon drums, and then placed in 55-gallon drums. Some individual items may be unbagged.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-W358.855**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                   |                       |                     |                                       |            |          |    |
|-------------|-----------------------------------|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory         | Final Waste Form      | Uncategorized Metal | Waste Matrix Code                     | S5420      | Handling | CH |
| Source Cat. | Other/Multiple Sources            | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | PU NEUTRON SOURCES:CH-Cert-repack |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| Bin - Misc                | 3.5        | 0.0        | 3.5        |
| <b>Current Form Total</b> | <b>3.5</b> | <b>0.0</b> | <b>3.5</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 3.3        | 0.0        | 3.3        |
| <b>Final Form Total</b>     | <b>3.3</b> | <b>0.0</b> | <b>3.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 96.20                                |
| Aluminum-based Metals/Alloys    | 0.80                                 |
| Other Metals                    | 0.10                                 |
| Other Inorganic Materials       | 2.40                                 |
| Cellulosics                     | 80.90                                |
| Rubber                          | 7.30                                 |
| Plastics                        | 64.90                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-238  | 6.09E+02                                   |
| Pu-239  | 3.02E+00                                   |
| Pu-240  | 5.80E+00                                   |
| Th-230  | 9.97E-07                                   |
| Th-232  | 5.14E-16                                   |
| U-234   | 1.99E-02                                   |
| U-235   | 3.27E-08                                   |
| U-236   | 1.89E-06                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream was generated at Argonne National Laboratory-West at the INEL. These wastes consist of noncombustible materials including Pu-Be neutron sources (small fuel samples, small sections of moderator, a pu standard, and pu foil), tools, hot cell operating equipment, various containers, and ferrous and nonferrous metals. Some combustible materials may include paper, plastic and PVC containers, rags, Q-tips, string mop heads, and an electrical plug strip and cord.

The organic content is less than 14 lb/ft<sup>3</sup>. Combustibles, including packaging, may exceed 25 volume percent. The levels of dispersible fines should be within WIPP-WAC limits. No sludges or free liquids should be present. No explosive or pyrophoric materials should be in this waste.

These wastes are packaged three different ways, depending on when the packaging was done. Pu-Be sources packaged in 1975 were placed in a carbon steel pipe, which was cemented and encapsulated into the center of a 55-gallon drum. In 1978, Pu-Be sources were packaged in four 55-gallon drums. Wastes packed in 1980 were wrapped plastic, placed in paraffin lined 15 gallon drums, and then placed in 55-gallon drums. Some individual items may be unbagged.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.



Waste Stream ID: **IN-W358.948**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                     |                       |                     |                                       |            |          |    |
|-------------|-------------------------------------|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory           | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code                     | S5420      | Handling | CH |
| Source Cat. | Other/Multiple Sources              | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | PU NEUTRON SOURCES:CH-Uncertifiable |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>      | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 96.20                                |
| Aluminum-based Metals/Alloys    | 0.80                                 |
| Other Metals                    | 0.10                                 |
| Other Inorganic Materials       | 2.40                                 |
| Cellulosics                     | 80.90                                |
| Rubber                          | 7.30                                 |
| Plastics                        | 64.90                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-238  | 2.03E+03                                   |
| Pu-239  | 1.01E+01                                   |
| Pu-240  | 1.93E+01                                   |
| Th-230  | 3.32E-06                                   |
| Th-232  | 1.71E-15                                   |
| U-234   | 6.62E-02                                   |
| U-235   | 1.09E-07                                   |
| U-236   | 6.31E-06                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream was generated at Argonne National Laboratory-West at the INEL. These wastes consist of noncombustible materials including Pu-Be neutron sources (small fuel samples, small sections of moderator, a pu standard, and pu foil), tools, hot cell operating equipment, various containers, and ferrous and nonferrous metals. Some combustible materials may include paper, plastic and PVC containers, rags, Q-tips, string mop heads, and an electrical plug strip and cord.

The organic content is less than 14 lb/ft<sup>3</sup>. Combustibles, including packaging, may exceed 25 volume percent. The levels of dispersible fines should be within WIPP-WAC limits. No sludges or free liquids should be present. No explosive or pyrophoric materials should be in this waste.

These wastes are packaged three different ways, depending on when the packaging was done. Pu-Be sources packaged in 1975 were placed in a carbon steel pipe, which was cemented and encapsulated into the center of a 55-gallon drum. In 1978, Pu-Be sources were packaged in four 55-gallon drums. Wastes packed in 1980 were wrapped plastic, placed in paraffin lined 15 gallon drums, and then placed in 55-gallon drums. Some individual items may be unbagged.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-W358.949**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                   |                       |                     |                                       |            |          |    |
|-------------|-----------------------------------|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory         | Final Waste Form      | Uncategorized Metal | Waste Matrix Code                     | S5420      | Handling | RH |
| Source Cat. | Other/Multiple Sources            | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | PU NEUTRON SOURCES:RH-Cert-repack |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.2        | 0.0        | 1.2        |
| RH Insert                   | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>1.5</b> | <b>0.0</b> | <b>1.5</b> |

| Final Form Volumes                         |             |            |             |
|--|-------------|------------|-------------|
| Container Type                             | Stored      | Proj.      | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 10.7        | 0.0        | 10.7        |
| <b>Final Form Total</b>                    | <b>10.7</b> | <b>0.0</b> | <b>10.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 55.60                                |
| Aluminum-based Metals/Alloys    | 0.46                                 |
| Other Metals                    | 0.06                                 |
| Other Inorganic Materials       | 1.39                                 |
| Cellulosics                     | 46.76                                |
| Rubber                          | 4.22                                 |
| Plastics                        | 37.51                                |
| Cements                         | 2150.00                              |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-238  | 4.27E+02                                   |
| Pu-239  | 2.12E+00                                   |
| Pu-240  | 4.07E+00                                   |
| Th-230  | 6.99E-07                                   |
| Th-232  | 3.60E-16                                   |
| U-234   | 1.39E-02                                   |
| U-235   | 2.30E-08                                   |
| U-236   | 1.33E-06                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream was generated at Argonne National Laboratory-West at the INEL. These wastes consist of noncombustible materials including Pu-Be neutron sources (small fuel samples, small sections of moderator, a pu standard, and pu foil), tools, hot cell operating equipment, various containers, and ferrous and nonferrous metals. Some combustible materials may include paper, plastic and PVC containers, rags, Q-tips, string mop heads, and an electrical plug strip and cord.

The organic content is less than 14 lb/ft<sup>3</sup>. Combustibles, including packaging, may exceed 25 volume percent. The levels of dispersible fines should be within WIPP-WAC limits. No sludges or free liquids should be present. No explosive or pyrophoric materials should be in this waste.

These wastes are packaged three different ways, depending on when the packaging was done. Pu-Be sources packaged in 1975 were placed in a carbon steel pipe, which was cemented and encapsulated into the center of a 55-gallon drum. In 1978, Pu-Be sources were packaged in four 55-gallon drums. Wastes packed in 1980 were wrapped plastic, placed in paraffin lined 15 gallon drums, and then placed in 55-gallon drums. Some individual items may be unbagged.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-W361.1021**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                     |                   |            |          |    |
|-------------|---|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory               | Final Waste Form                      | Inorganic Non-Metal | Waste Matrix Code | S3111      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | SOOT:Direct Ship                        | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 5.2        | 0.0        | 5.2        |
| <b>Current Form Total</b>   | <b>5.2</b> | <b>0.0</b> | <b>5.2</b> |

| Final Form Volumes                  |             |            |             |
|-------------------------------------|-------------|------------|-------------|
| Container Type                      | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner                 | 1.9         | 0.0        | 1.9         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 9.6         | 0.0        | 9.6         |
| <b>Final Form Total</b>             | <b>11.5</b> | <b>0.0</b> | <b>11.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1.21                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 3.94                                 |
| Cellulosics                     | 5.84                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.91                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 207.12                               |
| Packaging Material, Plastic     | 13.64                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.84E-01                                   |
| Np-237  | 1.53E-06                                   |
| Pu-238  | 2.01E-01                                   |
| Pu-239  | 6.37E+00                                   |
| Pu-240  | 1.41E+00                                   |
| Pu-241  | 1.16E+01                                   |
| Pu-242  | 2.48E-04                                   |
| Th-229  | 1.68E-14                                   |
| Th-230  | 8.11E-10                                   |
| Th-232  | 2.98E-16                                   |
| U-233   | 4.04E-11                                   |
| U-234   | 1.04E-05                                   |
| U-235   | 1.07E-07                                   |
| U-236   | 7.10E-07                                   |
| U-238   | 6.36E-13                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste, generated at the Rocky Flats Plant, consists of flyash generated from periodic cleaning of the Pu recovery incinerator off-gas system. Ash is packaged in 1- and 2-quart PE bottles and then in standard RFP fashion in drums. Drums will hold up to 50 bottles depending on Pu content. Bottles are individually assayed and fissile quantities calculated.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-W362.1020**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                     |                   |            |          |    |
|-------------|---|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory               | Final Waste Form                      | Inorganic Non-Metal | Waste Matrix Code | S3111      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | ASH HEELS:Direct Ship                   | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 21.4        | 0.0        | 21.4        |
| <b>Current Form Total</b>   | <b>21.4</b> | <b>0.0</b> | <b>21.4</b> |

| Final Form Volumes                  |             |            |             |
|-------------------------------------|-------------|------------|-------------|
| Container Type                      | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner                 | 7.6         | 0.0        | 7.6         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 38.3        | 0.0        | 38.3        |
| <b>Final Form Total</b>             | <b>45.9</b> | <b>0.0</b> | <b>45.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1.25                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 4.05                                 |
| Cellulosics                     | 6.01                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.94                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 207.12                               |
| Packaging Material, Plastic     | 13.64                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.57E+00                                   |
| Np-237  | 4.94E-06                                   |
| Pu-238  | 6.56E-01                                   |
| Pu-239  | 2.08E+01                                   |
| Pu-240  | 4.58E+00                                   |
| Pu-241  | 3.77E+01                                   |
| Pu-242  | 7.88E-04                                   |
| Th-229  | 5.37E-14                                   |
| Th-230  | 2.65E-09                                   |
| Th-232  | 9.71E-16                                   |
| U-233   | 1.30E-10                                   |
| U-234   | 3.38E-05                                   |
| U-235   | 3.49E-07                                   |
| U-236   | 2.31E-06                                   |
| U-238   | 2.02E-12                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste, generated at the Rocky Flats Plant, consists of ash heels generated from the recovery of Pu from incinerator ash. Ash is packaged in 0.5-and 1-gallon PE bottles and then in standard RFP fashion in drums. Drums will hold up to 25 bottles depending on Pu content. Bottles are individually assayed and fissile quantities calculated.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-W363.1019**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                                       |            |          |    |
|-------------|---|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory               | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code                     | S3111      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | VIRGIN INCINERATOR ASH:Direct Ship      |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.3        | 0.0        | 2.3        |
| <b>Current Form Total</b>   | <b>2.3</b> | <b>0.0</b> | <b>2.3</b> |

| Final Form Volumes                  |            |            |            |
|-------------------------------------|------------|------------|------------|
| Container Type                      | Stored     | Proj.      | Total      |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 4.8        | 0.0        | 4.8        |
| <b>Final Form Total</b>             | <b>4.8</b> | <b>0.0</b> | <b>4.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1.39                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 4.54                                 |
| Cellulosics                     | 6.73                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.05                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 217.70                               |
| Packaging Material, Plastic     | 16.10                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.07E-01                                   |
| Np-237  | 2.23E-06                                   |
| Pu-238  | 2.95E-01                                   |
| Pu-239  | 9.38E+00                                   |
| Pu-240  | 2.06E+00                                   |
| Pu-241  | 1.70E+01                                   |
| Pu-242  | 3.18E-04                                   |
| Th-229  | 2.42E-14                                   |
| Th-230  | 1.19E-09                                   |
| Th-232  | 4.36E-16                                   |
| U-233   | 5.84E-11                                   |
| U-234   | 1.53E-05                                   |
| U-235   | 1.57E-07                                   |
| U-236   | 1.04E-06                                   |
| U-238   | 8.16E-13                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste, generated at the Rocky Flats Plant, consists of ash generated in the Pu recovery incinerator. Ash is packaged in 0.5- and 1-gallon PE bottles and then in standard RFP fashion in drums. Drums will hold up to 25 bottles depending on Pu content. Bottles are individually assayed and fissile quantities calculated.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-W364.1011**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                                       |            |          |    |
|-------------|---|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory               | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code                     | S5190      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SAND, SLAG AND CRUCIBLES:Direct Ship    |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.5        | 0.0        | 1.5        |
| <b>Current Form Total</b>   | <b>1.5</b> | <b>0.0</b> | <b>1.5</b> |

| Final Form Volumes                  |            |            |            |
|-------------------------------------|------------|------------|------------|
| Container Type                      | Stored     | Proj.      | Total      |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 4.8        | 0.0        | 4.8        |
| <b>Final Form Total</b>             | <b>4.8</b> | <b>0.0</b> | <b>4.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 146.00                               |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 217.70                               |
| Packaging Material, Plastic     | 16.10                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.17E+00                                   |
| Np-237  | 3.67E-06                                   |
| Pu-238  | 4.87E-01                                   |
| Pu-239  | 1.54E+01                                   |
| Pu-240  | 3.39E+00                                   |
| Pu-241  | 2.80E+01                                   |
| Pu-242  | 7.89E-04                                   |
| Th-229  | 3.99E-14                                   |
| Th-230  | 1.96E-09                                   |
| Th-232  | 7.19E-16                                   |
| U-233   | 9.63E-11                                   |
| U-234   | 2.51E-05                                   |
| U-235   | 2.58E-07                                   |
| U-236   | 1.71E-06                                   |
| U-238   | 2.02E-12                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

Specific information is not available for this content code. The waste stream is thought to be similar to content code 391, crucibles and sand. The operation which generated the waste is unknown. The waste packaging and handling procedures are unknown, although the waste form is thought to be similar to content code 391.

Waste Stream ID: **IN-W365.1010**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                     |                   |            |          |    |
|-------------|---|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory               | Final Waste Form                      | Inorganic Non-Metal | Waste Matrix Code | S5190      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | CRUCIBLES AND SAND:Direct Ship          | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 4.8        | 0.0        | 4.8        |
| <b>Current Form Total</b>   | <b>4.8</b> | <b>0.0</b> | <b>4.8</b> |

| Final Form Volumes                  |             |            |             |
|-------------------------------------|-------------|------------|-------------|
| Container Type                      | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner                 | 1.9         | 0.0        | 1.9         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 9.6         | 0.0        | 9.6         |
| <b>Final Form Total</b>             | <b>11.5</b> | <b>0.0</b> | <b>11.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 175.57                               |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 207.12                               |
| Packaging Material, Plastic     | 13.64                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.06E+01                                   |
| Np-237  | 1.70E-04                                   |
| Pu-238  | 1.62E-01                                   |
| Pu-239  | 5.13E+00                                   |
| Pu-240  | 1.13E+00                                   |
| Pu-241  | 9.31E+00                                   |
| Pu-242  | 2.17E-04                                   |
| Th-229  | 3.33E-12                                   |
| Th-230  | 6.53E-10                                   |
| Th-232  | 2.39E-16                                   |
| U-233   | 6.26E-09                                   |
| U-234   | 8.35E-06                                   |
| U-235   | 8.60E-08                                   |
| U-236   | 5.69E-07                                   |
| U-238   | 5.57E-13                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste consists of broken magnesium oxide crucibles and limited amounts of magnesium oxide sand, used in a molten salt cleanup project when reducing plutonium tetrafluoride to plutonium metal. Above-discard levels of plutonium were recovered from these crucibles by nitric acid leaching.

The waste stream handling and packaging is as follows: the crucibles were placed into 1-gallon PE bottles. Each bottle was double-bagged out the glovebox in PVC and PE bags. Each bottle was assayed and the placed in prepared 55 gallon drums, about 12-16 bottles per drum. Some of the drums were lead-lined. Prior to 1972, the drums were lined with one or two PE bags, which were sealed with tape. Some of the drums may have cardboard liners inside of the inner liner. After 1972, 90-mil sealed rigid liners were used in addition to one or two PE bags.

Since 1972, drums were inspected (and corrected where needed) for free liquids, proper packaging, and proper content code. One to two quarts of Oil-dri was placed on the outer sealed PE drum bag. Starting in February 1982, 3-12 lb of vermiculite was used to fill the space between the outer drum bag and the rigid liner.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-W366.841**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                             |                                       |                     |                   |            |          |    |
|-------------|-----------------------------|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory   | Final Waste Form                      | Inorganic Non-Metal | Waste Matrix Code | S5190      | Handling | CH |
| Source Cat. | Analytical Laboratory Waste | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | LECO CRUCIBLES:Direct Ship  | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 7.5        | 0.0        | 7.5        |
| <b>Current Form Total</b>   | <b>7.5</b> | <b>0.0</b> | <b>7.5</b> |

| Final Form Volumes                  |             |            |             |
|-------------------------------------|-------------|------------|-------------|
| Container Type                      | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner                 | 1.9         | 0.0        | 1.9         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 14.4        | 0.0        | 14.4        |
| <b>Final Form Total</b>             | <b>16.3</b> | <b>0.0</b> | <b>16.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 194.07                               |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 210.24                               |
| Packaging Material, Plastic     | 14.37                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.07E-01                                   |
| Np-237  | 1.15E-06                                   |
| Pu-238  | 9.71E-02                                   |
| Pu-239  | 3.06E+00                                   |
| Pu-240  | 6.73E-01                                   |
| Pu-241  | 5.56E+00                                   |
| Pu-242  | 1.18E-04                                   |
| Th-229  | 1.63E-14                                   |
| Th-230  | 3.91E-10                                   |
| Th-232  | 1.43E-16                                   |
| U-233   | 3.48E-11                                   |
| U-234   | 5.01E-06                                   |
| U-235   | 5.13E-08                                   |
| U-236   | 3.39E-07                                   |
| U-238   | 3.03E-13                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

122/222

## Waste Stream Description

This waste stream includes blank LECO crucibles and caps used for sample analysis. The crucibles are 1 inch high by 1 inch diameter, made of fired silica based ceramic. The crucibles were used to calibrate the LECO analyzer, and contain fused amounts of accelerating metals (iron, tin, copper, titanium, stainless steel, etc.) used for blank calibration. The crucibles should be unbroken except for those generated prior to 1975, which were broken before packaging. Even when broken, there should be minimal respirable or dispersible fines which would not exceed the WIPP-WAC.

The waste stream handling and packaging is as follows: blank crucibles and caps were placed into 1-gallon metal paint cans, about 150-200 per can. The can lid was placed and sealed with tape. Each paint can was double-bagged out the glovebox in PVC or PE-PVC bags and placed in prepared 55-gallon drums, about 20-25 cans per drum. Prior to 1972, 90-mil sealed rigid liners were used in addition to the two PE bags.

Since 1972, drums were inspected (and corrected where needed) for free liquids, proper packaging, and proper content code. One to two quarts of Oil-dri was placed on the outer sealed PE drum bag. Starting in February 1982, 3-12 lb of vermiculite was used to fill the space between the outer drum bag and the rigid liner.



Waste Stream ID: **IN-W372.832**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                 |                       |                     |                                       |            |          |    |
|-------------|---------------------------------|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory       | Final Waste Form      | Uncategorized Metal | Waste Matrix Code                     | S3100      | Handling | CH |
| Source Cat. | Source Information Not Compiled | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | MET SAMPLES FISSILE:Direct Ship |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Current Form Total</b>   | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

| Final Form Volumes                |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>           | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 111.26                               |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 211.10                               |
| Packaging Material, Plastic     | 16.30                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.39E+00                                   |
| Np-237  | 1.34E-05                                   |
| Pu-239  | 2.13E-02                                   |
| Pu-240  | 1.06E-17                                   |
| Pu-244  | 1.41E-14                                   |
| Th-229  | 2.63E-13                                   |
| U-233   | 4.94E-10                                   |
| U-235   | 3.57E-10                                   |
| U-236   | 1.54E-24                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

There is no descriptive or constituent information available for this waste, which was generated at Bettis Atomic Power Laboratory.

Waste Stream ID: **IN-W372.918**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                    |                       |                     |                                       |            |          |    |
|-------------|------------------------------------|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory          | Final Waste Form      | Uncategorized Metal | Waste Matrix Code                     | S3100      | Handling | RH |
| Source Cat. | Source Information Not Compiled    | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | MET SAMPLES FISSILE:RH-Cert-repack |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.9        | 0.0        | 2.9        |
| <b>Current Form Total</b>   | <b>2.9</b> | <b>0.0</b> | <b>2.9</b> |

| Final Form Volumes                         |            |            |            |
|--|------------|------------|------------|
| Container Type                             | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 4.5        | 0.0        | 4.5        |
| <b>Final Form Total</b>                    | <b>4.5</b> | <b>0.0</b> | <b>4.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 270.87                               |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.48E-02                                   |
| Cs-137  | 4.27E-02                                   |
| Np-237  | 1.25E-07                                   |
| Pu-238  | 2.86E-02                                   |
| Pu-239  | 8.20E-04                                   |
| Th-229  | 1.03E-15                                   |
| Th-230  | 4.68E-11                                   |
| U-233   | 2.98E-12                                   |
| U-234   | 9.33E-07                                   |
| U-235   | 8.89E-12                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

There is no descriptive or constituent information available for this waste, which was generated at Bettis Atomic Power Laboratory.

Waste Stream ID: **IN-W375.1096**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory                    | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3122      | Handling | CH |
| Source Cat. | Pollution Control or Waste Treatment Process | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | SLUDGE:Direct Ship                           | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 62.8        | 0.0        | 62.8        |
| Box - Misc                  | 25.4        | 0.0        | 25.4        |
| <b>Current Form Total</b>   | <b>88.2</b> | <b>0.0</b> | <b>88.2</b> |

| Final Form Volumes                  |              |            |              |
|-------------------------------------|--------------|------------|--------------|
| Container Type                      | Stored       | Proj.      | Total        |
| SWB Dir Ld w/ Liner                 | 32.1         | 0.0        | 32.1         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 167.7        | 0.0        | 167.7        |
| <b>Final Form Total</b>             | <b>199.8</b> | <b>0.0</b> | <b>199.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 96.11                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 57.66                                |
| Inorganic Matrix                | 86.53                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 207.37                               |
| Packaging Material, Plastic     | 13.70                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.98E-03                                   |
| Np-237  | 2.20E-08                                   |
| Pu-238  | 2.91E-03                                   |
| Pu-239  | 9.23E-02                                   |
| Pu-240  | 2.04E-02                                   |
| Pu-241  | 1.68E-01                                   |
| Pu-242  | 3.70E-06                                   |
| Th-229  | 2.39E-16                                   |
| Th-230  | 1.17E-11                                   |
| Th-232  | 4.31E-18                                   |
| U-233   | 5.76E-13                                   |
| U-234   | 1.50E-07                                   |
| U-235   | 1.55E-09                                   |
| U-236   | 1.03E-08                                   |
| U-238   | 9.49E-15                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream, generated at the Rocky Flats Plant, is sewage sludge from cleaning stabilization ponds. This waste also contains a limited number of drums containing sludge generated by plutonium recovery operations. The sludge may be moist or dry, and may consist of fines, chunks or pieces of dried cake. Shipment of sewer sludge to the INEL stopped in 1976.

There are high levels of fines. In addition the drums may contain free liquids. The sewage sludge should contain less than 10 nCi/g TRU elements. The portion of the waste that is suspected to be TRU is addressed by this waste stream. Organic content in the sludge is not known. No free liquids should be present. No explosive, pyrophoric, or corrosive materials should be in the waste.

Sewer sludge was placed directly into prepared 55-gallon drums until 1974. Drums were prepared according to pre and post-1972 procedures. Portland cement was added to the bottom and top of the inner bag. If the sludge was moist, portland cement was also added in layers with the sludge. Since 1974, packaging was changed to 4 x 4 x 7 ft fiberglass-reinforced polyester (FRP) coated plywood boxes due to the pressure buildup in the drums. Each box was lined with a PE bag and a cardboard liner. About 90 lb of portland cement was added to the bottom and top of each box. Fissile content of the sewage was determined by radiochemical analysis of sludge samples.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **KA-T001**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Knolls Atomic Power Laboratory - Schenectady | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | RH |
| Source Cat. | R&D/R&D Laboratory Waste                     | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Transuranic Debris                           |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| 5-gal Can                 | 2.0        | 4.9        | 6.9        |
| <b>Current Form Total</b> | <b>2.0</b> | <b>4.9</b> | <b>6.9</b> |

| Final Form Volumes                         |             |             |              |
|--|-------------|-------------|--------------|
| Container Type                             | Stored      | Proj.       | Total        |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 30.3        | 72.1        | 102.4        |
| <b>Final Form Total</b>                    | <b>30.3</b> | <b>72.1</b> | <b>102.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 98.20                                |
| Aluminum-based Metals/Alloys    | 0.60                                 |
| Other Metals                    | 0.10                                 |
| Other Inorganic Materials       | 2.40                                 |
| Cellulosics                     | 80.90                                |
| Rubber                          | 7.30                                 |
| Plastics                        | 64.90                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.37E-04                                   |
| Am-243  | 5.57E-07                                   |
| Cm-244  | 1.37E-05                                   |
| Cs-137  | 7.42E-01                                   |
| Np-237  | 9.00E-06                                   |
| Pu-238  | 2.90E-02                                   |
| Pu-239  | 7.99E-05                                   |
| Pu-240  | 2.00E-05                                   |
| Pu-241  | 2.34E-03                                   |
| Pu-242  | 7.63E-08                                   |
| Pu-244  | 1.81E-14                                   |
| Sr-90   | 7.05E-01                                   |
| Th-229  | 1.17E-11                                   |
| Th-230  | 1.65E-08                                   |
| Th-232  | 4.38E-13                                   |
| U-233   | 4.26E-09                                   |
| U-234   | 5.12E-05                                   |
| U-235   | 7.61E-07                                   |
| U-236   | 7.22E-06                                   |
| U-238   | 3.34E-09                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

## Waste Stream Description

Organic and inorganic particulate and debris.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **KA-W016**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Knolls Atomic Power Laboratory - Schenectady | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | RH |
| Source Cat. | R&D/R&D Laboratory Waste                     | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Transuranic Debris                           |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| 5-gal Can                 | 0.0        | 0.5        | 0.5        |
| <b>Current Form Total</b> | <b>0.0</b> | <b>0.5</b> | <b>0.5</b> |

| Final Form Volumes                         |            |            |            |
|--|------------|------------|------------|
| Container Type                             | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 0.0        | 8.0        | 8.0        |
| <b>Final Form Total</b>                    | <b>0.0</b> | <b>8.0</b> | <b>8.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 98.20                                |
| Aluminum-based Metals/Alloys    | 0.60                                 |
| Other Metals                    | 0.10                                 |
| Other Inorganic Materials       | 2.40                                 |
| Cellulosics                     | 80.90                                |
| Rubber                          | 7.30                                 |
| Plastics                        | 64.90                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.37E-04                                   |
| Am-243  | 5.57E-07                                   |
| Cm-244  | 1.37E-05                                   |
| Cs-137  | 7.42E-01                                   |
| Np-237  | 9.00E-06                                   |
| Pu-238  | 2.90E-02                                   |
| Pu-239  | 7.99E-05                                   |
| Pu-240  | 2.00E-05                                   |
| Pu-241  | 2.34E-03                                   |
| Pu-242  | 7.63E-08                                   |
| Pu-244  | 1.81E-14                                   |
| Sr-90   | 7.05E-01                                   |
| Th-229  | 1.17E-11                                   |
| Th-230  | 1.65E-08                                   |
| Th-232  | 4.38E-13                                   |
| U-233   | 4.26E-09                                   |
| U-234   | 5.12E-05                                   |
| U-235   | 7.61E-07                                   |
| U-236   | 7.22E-06                                   |
| U-238   | 3.34E-09                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D035, D039, D040, F001, F002, F003, F005

## TRUCON Code(s)

325

## Waste Stream Description

This transuranic mixed waste has not yet been generated. Waste will be segregated to the extent possible (considering ALARA) into inorganic, organic and heterogeneous waste streams and packaged separately. Details of waste characteristics will be developed upon generation. This waste stream will not be moratorium waste.

Waste Stream ID: **KN-B234PCBTRU**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Knolls Atomic Power Laboratory - Nuclear Fuel Services | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Remediation/D&D Waste                                  | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Building 234 PCB TRU Waste                             | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 0.4        | 0.0        | 0.4        |
| <b>Current Form Total</b>    | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b>      | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 10.70                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 2.10                                 |
| Rubber                          | 21.50                                |
| Plastics                        | 2.20                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.60E-02                                   |
| Np-237  | 2.06E-08                                   |
| Pu-238  | 2.60E-03                                   |
| Pu-239  | 3.18E-02                                   |
| Pu-240  | 1.07E-02                                   |
| Pu-241  | 4.64E-02                                   |
| Pu-242  | 1.15E-06                                   |
| Th-229  | 1.71E-08                                   |
| Th-230  | 1.10E-10                                   |
| Th-232  | 8.29E-08                                   |
| U-233   | 4.55E-05                                   |
| U-234   | 3.07E-06                                   |
| U-235   | 1.45E-07                                   |
| U-236   | 1.27E-09                                   |
| U-238   | 1.66E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

This waste is non-mixed debris from Building 234. The debris consists of metal chips/shavings, dust, cheesecloth, gloves, and plastic bottles from the cleanout of the shear baler used to decommission process equipment and glove boxes. It also includes rubber gasket material used to install glove boxes.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: KN-B234TRU

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Knolls Atomic Power Laboratory - Nuclear Fuel Services | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Remediation/D&D Waste                                  | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Building 234 TRU Waste                                 | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |            |              |              |
|------------------------------|------------|--------------|--------------|
| Container Type               | Stored     | Proj.        | Total        |
| 55-gal Drum Dir Ld w/o Liner | 1.7        | 124.8        | 126.5        |
| <b>Current Form Total</b>    | <b>1.7</b> | <b>124.8</b> | <b>126.5</b> |

| Final Form Volumes           |            |              |              |
|------------------------------|------------|--------------|--------------|
| Container Type               | Stored     | Proj.        | Total        |
| 55-gal Drum Dir Ld w/o Liner | 1.7        | 124.8        | 126.5        |
| <b>Final Form Total</b>      | <b>1.7</b> | <b>124.8</b> | <b>126.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 35.70                                |
| Aluminum-based Metals/Alloys    | 2.60                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 33.60                                |
| Cellulosics                     | 5.10                                 |
| Rubber                          | 0.30                                 |
| Plastics                        | 31.50                                |
| Cements                         | 2270.00                              |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 68.60                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.53E-01                                   |
| Np-237  | 4.55E-07                                   |
| Pu-238  | 5.73E-02                                   |
| Pu-239  | 7.04E-01                                   |
| Pu-240  | 2.37E-01                                   |
| Pu-241  | 1.02E+00                                   |
| Pu-242  | 1.83E-06                                   |
| Th-229  | 2.52E-08                                   |
| Th-230  | 1.82E-10                                   |
| Th-232  | 1.30E-07                                   |
| U-233   | 6.72E-05                                   |
| U-234   | 5.38E-06                                   |
| U-235   | 2.28E-07                                   |
| U-236   | 2.81E-08                                   |
| U-238   | 1.79E-05                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

This waste is non-hazardous debris and soil from Building 234. All process equipment and glove boxes were removed in the early 1990s and are not part of this waste stream. The debris consists of concrete block, metal, PPE, plywood, plexiglass, plastic, HEPA filters, piping, duct work, glass, cheese cloth, paper, rubber and small tools.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LA-LAMHDO1

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory  | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste                          | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Debris waste includes paper, rags, plastic, rubber, wood-based HEPA filters |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |              |            |              |
|---|--------------|------------|--------------|
| Container Type                          | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner             | 202.0        | 0.0        | 202.0        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 34.5         | 0.0        | 34.5         |
| SWB w/ 4 - 55-gal Drums w/ Liners       | 17.0         | 0.0        | 17.0         |
| <b>Current Form Total</b>               | <b>253.4</b> | <b>0.0</b> | <b>253.4</b> |

| Final Form Volumes                |              |            |              |
|-----------------------------------|--------------|------------|--------------|
| Container Type                    | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner       | 224.2        | 0.0        | 224.2        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 17.0         | 0.0        | 17.0         |
| <b>Final Form Total</b>           | <b>241.2</b> | <b>0.0</b> | <b>241.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 111.68                               |
| Aluminum-based Metals/Alloys    | 0.45                                 |
| Other Metals                    | 13.39                                |
| Other Inorganic Materials       | 72.43                                |
| Cellulosics                     | 9.24                                 |
| Rubber                          | 13.86                                |
| Plastics                        | 42.76                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.78                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 136.46                               |
| Packaging Material, Plastic     | 35.54                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.28E+00                                   |
| Am-243  | 1.30E-04                                   |
| Cm-244  | 1.19E-04                                   |
| Cs-137  | 1.48E-07                                   |
| Np-237  | 4.98E-05                                   |
| Pu-238  | 7.21E+00                                   |
| Pu-239  | 2.82E+01                                   |
| Pu-240  | 6.91E+00                                   |
| Pu-241  | 3.45E+01                                   |
| Pu-242  | 1.41E-02                                   |
| Pu-244  | 1.26E-08                                   |
| Sr-90   | 1.49E-07                                   |
| Th-229  | 1.08E-06                                   |
| Th-230  | 1.62E-07                                   |
| Th-232  | 3.61E-09                                   |
| U-233   | 4.25E-04                                   |
| U-234   | 9.63E-04                                   |
| U-235   | 2.49E-06                                   |
| U-236   | 5.63E-06                                   |
| U-238   | 2.95E-05                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

Debris waste includes paper, rags, plastic, rubber, wood-based HEPA filters

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.



Waste Stream ID: LA-LAMHDO2238

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | MIXED HETEROGENEOUS DEBRIS WASTE, PU-238           |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |            |             |             |
|-----------------------------------|------------|-------------|-------------|
| Container Type                    | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner       | 5.4        | 46.6        | 52.0        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0         | 1.9         |
| <b>Current Form Total</b>         | <b>7.3</b> | <b>46.6</b> | <b>53.9</b> |

| Final Form Volumes                |            |             |             |
|-----------------------------------|------------|-------------|-------------|
| Container Type                    | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner       | 5.4        | 46.6        | 52.0        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0         | 1.9         |
| <b>Final Form Total</b>           | <b>7.3</b> | <b>46.6</b> | <b>53.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 64.43                                |
| Aluminum-based Metals/Alloys    | 0.26                                 |
| Other Metals                    | 7.72                                 |
| Other Inorganic Materials       | 41.79                                |
| Cellulosics                     | 5.33                                 |
| Rubber                          | 8.00                                 |
| Plastics                        | 24.67                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.03                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 133.62                               |
| Packaging Material, Plastic     | 36.27                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.30E-02                                   |
| Np-237  | 3.00E-08                                   |
| Pu-238  | 5.22E+01                                   |
| Pu-239  | 3.47E-02                                   |
| Pu-240  | 1.77E-02                                   |
| Pu-241  | 8.77E-01                                   |
| Pu-242  | 1.51E-05                                   |
| Th-229  | 1.77E-17                                   |
| Th-230  | 4.85E-08                                   |
| Th-232  | 1.16E-19                                   |
| U-233   | 1.91E-13                                   |
| U-234   | 2.02E-03                                   |
| U-235   | 1.03E-10                                   |
| U-236   | 1.57E-09                                   |
| U-238   | 6.84E-15                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D028, D035, D038, D039, D040, F001, F002, F003, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

MIXED HETEROGENEOUS DEBRIS WASTE, PU-238

Waste Stream ID: **LA-LAMHD03**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Remediation/D&D Waste  | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | MIXED HETEROGENEOUS DEBRIS WASTE, D&D, COMBUSTIBLE/NON COMBUSTIBLE |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 5.6        | 0.0        | 5.6        |
| <b>Current Form Total</b>   | <b>5.6</b> | <b>0.0</b> | <b>5.6</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 5.6        | 0.0        | 5.6        |
| <b>Final Form Total</b>     | <b>5.6</b> | <b>0.0</b> | <b>5.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 22.39                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 7.45                                 |
| Other Inorganic Materials       | 36.09                                |
| Cellulosics                     | 28.97                                |
| Rubber                          | 2.93                                 |
| Plastics                        | 85.25                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.06E+00                                   |
| Am-243  | 1.73E-06                                   |
| Np-237  | 1.94E-05                                   |
| Pu-238  | 3.66E+01                                   |
| Pu-239  | 1.52E+00                                   |
| Pu-240  | 3.82E-01                                   |
| Pu-241  | 1.78E+00                                   |
| Pu-242  | 2.44E-04                                   |
| Pu-244  | 1.55E-10                                   |
| Th-229  | 1.86E-12                                   |
| Th-230  | 4.31E-07                                   |
| Th-232  | 2.64E-16                                   |
| U-233   | 1.69E-09                                   |
| U-234   | 3.29E-03                                   |
| U-235   | 4.66E-07                                   |
| U-236   | 3.53E-07                                   |
| U-238   | 5.15E-08                                   |

## Haz. Waste No(s).

D008, F001, F002

## TRUCON Code(s)

125/225

## Waste Stream Description

MIXED HETEROGENEOUS DEBRIS WASTE, D&amp;D, COMBUSTIBLE/NON COMBUSTIBLE

Waste Stream ID: **LA-LAMINO2V**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                                       |            |          |    |
|-------------|---|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                              | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3120      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste          | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Mixed Inorganic Homogeneous Waste, Organics on Vermiculite. |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.0        | 5.4        | 6.4        |
| <b>Current Form Total</b>   | <b>1.0</b> | <b>5.4</b> | <b>6.4</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.0        | 5.4        | 6.4        |
| <b>Final Form Total</b>     | <b>1.0</b> | <b>5.4</b> | <b>6.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.01                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.01                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.46                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 85.47                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.31E-01                                   |
| Np-237  | 5.74E-07                                   |
| Pu-238  | 2.60E-01                                   |
| Pu-239  | 9.02E+00                                   |
| Pu-240  | 2.14E+00                                   |
| Pu-241  | 2.82E+01                                   |
| Pu-242  | 1.21E-04                                   |
| Th-229  | 1.52E-16                                   |
| Th-230  | 1.34E-11                                   |
| Th-232  | 6.27E-18                                   |
| U-233   | 2.46E-12                                   |
| U-234   | 1.48E-06                                   |
| U-235   | 1.78E-08                                   |
| U-236   | 1.27E-07                                   |
| U-238   | 3.65E-14                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

## TRUCON Code(s)

112/212

## Waste Stream Description

Mixed Inorganic Homogeneous Waste, Organics on Vermiculite.

Waste Stream ID: **LA-LAMINO3NC**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | MIXED INORGANIC HOMOGENEOUS WASTE, NONCEMENTED     |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| 55-gal POC - 12" w/ Liner   | 0.4        | 0.0        | 0.4        |
| <b>Current Form Total</b>   | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| 55-gal POC - 12" w/ Liner   | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b>     | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.18                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 34.23                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 395.20                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 91.67                                |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.27E+00                                   |
| Np-237  | 7.18E-07                                   |
| Pu-238  | 6.72E-01                                   |
| Pu-239  | 2.31E+01                                   |
| Pu-240  | 5.49E+00                                   |
| Pu-241  | 7.59E+01                                   |
| Pu-242  | 3.10E-04                                   |
| Th-229  | 4.82E-17                                   |
| Th-230  | 8.62E-12                                   |
| Th-232  | 4.02E-18                                   |
| U-233   | 1.55E-12                                   |
| U-234   | 1.91E-06                                   |
| U-235   | 2.28E-08                                   |
| U-236   | 1.63E-07                                   |
| U-238   | 4.69E-14                                   |

## Haz. Waste No(s).

D005, D006, D007,  
D008, D009, D010,  
D011

## TRUCON Code(s)

124/224

## Waste Stream Description

MIXED INORGANIC HOMOGENEOUS WASTE, NONCEMENTED

Waste Stream ID: **LA-LAMINO4S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | INORGANIC HOMOGENEOUS WASTE                        | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |             |             |
|-----------------------------|------------|-------------|-------------|
| Container Type              | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner | 7.1        | 40.4        | 47.4        |
| 55-gal POC - 12" w/ Liner   | 2.7        | 0.0         | 2.7         |
| <b>Current Form Total</b>   | <b>9.8</b> | <b>40.4</b> | <b>50.1</b> |

| Final Form Volumes          |            |             |             |
|-----------------------------|------------|-------------|-------------|
| Container Type              | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner | 7.1        | 40.4        | 47.4        |
| 55-gal POC - 12" w/ Liner   | 2.7        | 0.0         | 2.7         |
| <b>Final Form Total</b>     | <b>9.8</b> | <b>40.4</b> | <b>50.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.26                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 48.02                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 152.19                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 7.42                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.38E+00                                   |
| Np-237  | 4.66E-06                                   |
| Pu-238  | 1.36E+00                                   |
| Pu-239  | 3.16E+01                                   |
| Pu-240  | 8.09E+00                                   |
| Pu-241  | 1.19E+02                                   |
| Pu-242  | 5.02E-03                                   |
| Pu-244  | 2.45E-09                                   |
| Th-229  | 1.25E-15                                   |
| Th-230  | 7.00E-11                                   |
| Th-232  | 2.37E-17                                   |
| U-233   | 2.01E-11                                   |
| U-234   | 7.75E-06                                   |
| U-235   | 6.24E-08                                   |
| U-236   | 4.80E-07                                   |
| U-238   | 1.51E-12                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005, F006

## TRUCON Code(s)

124/224

## Waste Stream Description

INORGANIC HOMOGENEOUS WASTE

Waste Stream ID: LA-LA-NCD01

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                    |                       |                 |                                       |            |          |    |
|-------------|------------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Remediation/D&D Waste              | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Non-Mixed Combustible Debris Waste |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |             |             |
|-----------------------------|------------|-------------|-------------|
| Container Type              | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner | 4.4        | 55.5        | 59.9        |
| 55-gal POC - 12" w/ Liner   | 0.2        | 0.0         | 0.2         |
| <b>Current Form Total</b>   | <b>4.6</b> | <b>55.5</b> | <b>60.1</b> |

| Final Form Volumes          |            |             |             |
|-----------------------------|------------|-------------|-------------|
| Container Type              | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner | 4.4        | 55.5        | 59.9        |
| 55-gal POC - 12" w/ Liner   | 0.2        | 0.0         | 0.2         |
| <b>Final Form Total</b>     | <b>4.6</b> | <b>55.5</b> | <b>60.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 43.60                                |
| Aluminum-based Metals/Alloys    | 0.18                                 |
| Other Metals                    | 5.23                                 |
| Other Inorganic Materials       | 28.27                                |
| Cellulosics                     | 3.61                                 |
| Rubber                          | 5.41                                 |
| Plastics                        | 16.69                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.69                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 132.17                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.48                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.60E-01                                   |
| Am-243  | 2.12E-06                                   |
| Np-237  | 1.50E-05                                   |
| Pu-238  | 4.40E+00                                   |
| Pu-239  | 3.76E+00                                   |
| Pu-240  | 9.09E-01                                   |
| Pu-241  | 1.10E+01                                   |
| Pu-242  | 5.52E-05                                   |
| Th-229  | 2.70E-14                                   |
| Th-230  | 1.64E-09                                   |
| Th-232  | 5.99E-18                                   |
| U-233   | 1.93E-10                                   |
| U-234   | 7.97E-05                                   |
| U-235   | 3.82E-05                                   |
| U-236   | 8.09E-08                                   |
| U-238   | 4.71E-07                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Non-Mixed Combustible Debris Waste

Waste Stream ID: LA-LANHD01

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | NON-MIXED HETEROGENEOUS DEBRIS WASTE               |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |             |             |
|-----------------------------|------------|-------------|-------------|
| Container Type              | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner | 5.6        | 34.1        | 39.7        |
| <b>Current Form Total</b>   | <b>5.6</b> | <b>34.1</b> | <b>39.7</b> |

| Final Form Volumes          |            |             |             |
|-----------------------------|------------|-------------|-------------|
| Container Type              | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner | 5.6        | 34.1        | 39.7        |
| <b>Final Form Total</b>     | <b>5.6</b> | <b>34.1</b> | <b>39.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 102.78                               |
| Aluminum-based Metals/Alloys    | 0.42                                 |
| Other Metals                    | 12.32                                |
| Other Inorganic Materials       | 66.65                                |
| Cellulosics                     | 8.51                                 |
| Rubber                          | 12.76                                |
| Plastics                        | 39.35                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.64                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.47E+00                                   |
| Np-237  | 7.63E-06                                   |
| Pu-238  | 4.22E+00                                   |
| Pu-239  | 9.30E+00                                   |
| Pu-240  | 2.21E+00                                   |
| Pu-241  | 1.28E+01                                   |
| Pu-242  | 1.27E-04                                   |
| Th-229  | 1.69E-13                                   |
| Th-230  | 1.45E-07                                   |
| Th-232  | 5.84E-16                                   |
| U-233   | 2.94E-10                                   |
| U-234   | 9.67E-04                                   |
| U-235   | 1.22E-06                                   |
| U-236   | 1.24E-06                                   |
| U-238   | 1.22E-08                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

NON-MIXED HETEROGENEOUS DEBRIS WASTE

Waste Stream ID: **LA-LANHD02238**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | NON-MIXED HETEROGENEOUS DEBRIS WASTE, PU238        |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |              |              |
|-----------------------------|-------------|--------------|--------------|
| Container Type              | Stored      | Proj.        | Total        |
| 55-gal Drum Dir Ld w/ Liner | 35.2        | 285.4        | 320.5        |
| 55-gal POC - 12" w/ Liner   | 0.2         | 0.0          | 0.2          |
| <b>Current Form Total</b>   | <b>35.4</b> | <b>285.4</b> | <b>320.7</b> |

| Final Form Volumes          |             |              |              |
|-----------------------------|-------------|--------------|--------------|
| Container Type              | Stored      | Proj.        | Total        |
| 55-gal Drum Dir Ld w/ Liner | 35.2        | 285.4        | 320.5        |
| 55-gal POC - 12" w/ Liner   | 0.2         | 0.0          | 0.2          |
| <b>Final Form Total</b>     | <b>35.4</b> | <b>285.4</b> | <b>320.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 30.03                                |
| Aluminum-based Metals/Alloys    | 0.12                                 |
| Other Metals                    | 3.60                                 |
| Other Inorganic Materials       | 19.47                                |
| Cellulosics                     | 2.49                                 |
| Rubber                          | 3.73                                 |
| Plastics                        | 11.50                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.48                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 131.06                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.09                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.14E-01                                   |
| Am-243  | 4.63E-08                                   |
| Np-237  | 1.17E-06                                   |
| Pu-238  | 1.30E+02                                   |
| Pu-239  | 9.27E-02                                   |
| Pu-240  | 4.69E-02                                   |
| Pu-241  | 1.51E+00                                   |
| Pu-242  | 3.96E-05                                   |
| Th-229  | 3.03E-14                                   |
| Th-230  | 6.95E-07                                   |
| Th-232  | 5.81E-18                                   |
| U-233   | 5.35E-11                                   |
| U-234   | 8.41E-03                                   |
| U-235   | 1.19E-09                                   |
| U-236   | 1.81E-08                                   |
| U-238   | 7.76E-14                                   |

## Haz. Waste No(s).

D005, D006, D007,  
D008, D009, D010,  
D011

## TRUCON Code(s)

125/225

## Waste Stream Description

NON-MIXED HETEROGENEOUS DEBRIS WASTE, PU238



Waste Stream ID: LA-LANINO3NC

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | NON-CEMENTED SOLID INORGANIC (HOMOGENEOUS)         |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |              |              |
|-----------------------------|-------------|--------------|--------------|
| Container Type              | Stored      | Proj.        | Total        |
| 55-gal Drum Dir Ld w/ Liner | 26.4        | 140.4        | 166.8        |
| 55-gal POC - 12" w/ Liner   | 5.4         | 0.0          | 5.4          |
| <b>Current Form Total</b>   | <b>31.8</b> | <b>140.4</b> | <b>172.2</b> |

| Final Form Volumes          |             |              |              |
|-----------------------------|-------------|--------------|--------------|
| Container Type              | Stored      | Proj.        | Total        |
| 55-gal Drum Dir Ld w/ Liner | 26.4        | 140.4        | 166.8        |
| 55-gal POC - 12" w/ Liner   | 5.4         | 0.0          | 5.4          |
| <b>Final Form Total</b>     | <b>31.8</b> | <b>140.4</b> | <b>172.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 86.37                                |
| Aluminum-based Metals/Alloys    | 0.35                                 |
| Other Metals                    | 10.35                                |
| Other Inorganic Materials       | 56.01                                |
| Cellulosics                     | 7.15                                 |
| Rubber                          | 10.72                                |
| Plastics                        | 33.07                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.38                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 143.25                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 4.32                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.19E+00                                   |
| Am-243  | 2.91E-03                                   |
| Np-237  | 8.67E-04                                   |
| Pu-238  | 3.04E+01                                   |
| Pu-239  | 3.32E+01                                   |
| Pu-240  | 8.21E+00                                   |
| Pu-241  | 1.15E+02                                   |
| Pu-242  | 5.94E-04                                   |
| Th-229  | 7.07E-13                                   |
| Th-230  | 1.57E-09                                   |
| Th-232  | 2.41E-17                                   |
| U-233   | 7.55E-09                                   |
| U-234   | 1.74E-04                                   |
| U-235   | 6.56E-08                                   |
| U-236   | 4.87E-07                                   |
| U-238   | 1.79E-13                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

124/224, 125/225

## Waste Stream Description

NON-CEMENTED SOLID INORGANIC (HOMOGENEOUS)

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LA-MHD01.001-S

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                |                       |                 |                   |                                       |          |    |
|-------------|--------------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | N/A                            | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                            |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                    |                   |              |
|------------------------------------|-------------------|--------------|
| Container Type                     | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner        | WP-LA-MHD01.001   | 186.4        |
| 55-gal Drum Dir Ld w/o Liner       | WP-LA-MHD01.001   | 215.9        |
| SWB w/ 4 - 55-gal Drums w/ Liners  | WP-LA-MHD01.001   | 77.5         |
| SWB w/ 4 - 55-gal Drums w/o Liners | WP-LA-MHD01.001   | 7.6          |
| <b>Shipped Total</b>               |                   | <b>487.3</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 89.93                                |
| Aluminum-based Metals/Alloys | 0.32                                 |
| Other Metals                 | 10.63                                |
| Other Inorganic Materials    | 54.57                                |
| Cellulosics                  | 7.46                                 |
| Rubber                       | 10.79                                |
| Plastics                     | 33.73                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 1.28                                 |
| Organic Matrix               | 0.05                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.99E+00                                   |
| Am-243  | 1.73E-03                                   |
| Cm-244  | 6.49E-03                                   |
| Cs-137  | 1.52E-06                                   |
| Np-237  | 3.42E-04                                   |
| Pu-238  | 7.98E+00                                   |
| Pu-239  | 8.45E+01                                   |
| Pu-240  | 3.96E+00                                   |
| Pu-241  | 5.51E+02                                   |
| Pu-242  | 2.98E-03                                   |
| Sr-90   | 2.01E-03                                   |
| Th-229  | 9.79E-08                                   |
| Th-230  | 1.74E-05                                   |
| Th-232  | 9.27E-09                                   |
| U-233   | 1.04E-03                                   |
| U-234   | 1.47E-03                                   |
| U-235   | 4.78E-06                                   |
| U-236   | 1.17E-07                                   |
| U-238   | 4.51E-06                                   |

## Haz. Waste No(s).

D004, D005, D006,  
D007, D008, D009,  
D010, D011, D018,  
D019, D021, D022,  
D035, D038, D039,  
D040, F001, F002,  
F005

## TRUCON Code(s)

116/216, 117/217,  
123/223, 125/225,  
154

## Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LA-MHD02.001-S

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                |                                       |                 |                   |            |          |    |
|-------------|--------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | N/A                            | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                            | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | WP-LA-MHD02.001   | 5.0         |
| 55-gal Drum Dir Ld w/o Liner | WP-LA-MHD02.001   | 8.5         |
| <b>Shipped Total</b>         |                   | <b>13.5</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 78.72                                |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 3.17                                 |
| Other Inorganic Materials    | 17.11                                |
| Cellulosics                  | 3.40                                 |
| Rubber                       | 25.27                                |
| Plastics                     | 31.33                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.32E-01                                   |
| Am-243  | 2.96E-06                                   |
| Cs-137  | 1.80E-07                                   |
| Np-237  | 6.12E-06                                   |
| Pu-238  | 1.32E+02                                   |
| Pu-239  | 1.03E-01                                   |
| Pu-240  | 5.19E-02                                   |
| Pu-241  | 5.04E-01                                   |
| Pu-242  | 5.31E-05                                   |
| Sr-90   | 1.81E-07                                   |
| U-233   | 1.89E-07                                   |
| U-234   | 2.45E-02                                   |
| U-235   | 4.68E-08                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F005

## TRUCON Code(s)

125/225, 154

## Waste Stream Description

N/A

Waste Stream ID: **LA-MHD02238**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | MIXED HETEROGENEOUS DEBRIS WASTE PU-238.           |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>     | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 185.20                               |
| Aluminum-based Metals/Alloys    | 0.75                                 |
| Other Metals                    | 22.20                                |
| Other Inorganic Materials       | 120.11                               |
| Cellulosics                     | 15.33                                |
| Rubber                          | 22.99                                |
| Plastics                        | 70.91                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 2.95                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.32E-02                                   |
| Np-237  | 2.00E-08                                   |
| Pu-238  | 6.87E+01                                   |
| Pu-239  | 4.19E-02                                   |
| Pu-240  | 2.14E-02                                   |
| Pu-241  | 1.42E+00                                   |
| Pu-242  | 1.72E-05                                   |
| Th-229  | 5.25E-18                                   |
| Th-230  | 3.55E-09                                   |
| Th-232  | 6.26E-20                                   |
| U-233   | 8.50E-14                                   |
| U-234   | 3.93E-04                                   |
| U-235   | 8.26E-11                                   |
| U-236   | 1.27E-09                                   |
| U-238   | 5.18E-15                                   |

## Haz. Waste No(s).

D005, D006, D007,  
D008, D009, D010,  
D011

## TRUCON Code(s)

125/225

## Waste Stream Description

MIXED HETEROGENEOUS DEBRIS WASTE PU-238.

Waste Stream ID: LA-MHD03.001-S

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                |                       |                 |                   |                                       |          |    |
|-------------|--------------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | N/A                            | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                            |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | WP-LA-MHD03.001   | 0.2         |
| 55-gal Drum Dir Ld w/o Liner | WP-LA-MHD03.001   | 46.8        |
| <b>Shipped Total</b>         |                   | <b>47.0</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 9.76                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 1.79                                 |
| Other Inorganic Materials    | 29.17                                |
| Cellulosics                  | 19.46                                |
| Rubber                       | 1.31                                 |
| Plastics                     | 56.35                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.20E-01                                   |
| Am-243  | 6.60E-05                                   |
| Cs-137  | 4.12E-05                                   |
| Np-237  | 6.28E-05                                   |
| Pu-238  | 1.20E+00                                   |
| Pu-239  | 5.33E-01                                   |
| Pu-240  | 1.51E-01                                   |
| Pu-241  | 2.41E+00                                   |
| Pu-242  | 5.47E-05                                   |
| Sr-90   | 4.12E-05                                   |
| U-234   | 1.60E-04                                   |
| U-235   | 5.30E-07                                   |
| U-238   | 3.20E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D026, D027, D028, D029, D030, D035, D036, D037, D038, D039, D040, D043, F001, F002, F004, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: LA-MIN03-NC.001-S

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                |                                       |                       |                   |            |          |    |
|-------------|--------------------------------|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3120      | Handling | CH |
| Source Cat. | N/A                            | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                            | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                   |                    |              |
|-----------------------------------|--------------------|--------------|
| Container Type                    | Ref. Waste Stream  | Volume       |
| 55-gal Drum Dir Ld w/ Liner       | WP-LA-MIN03-NC.001 | 235.5        |
| SWB w/ 4 - 55-gal Drums w/ Liners | WP-LA-MIN03-NC.001 | 13.2         |
| <b>Shipped Total</b>              |                    | <b>248.7</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 3.94                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 0.68                                 |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 3.86                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 718.04                               |
| Organic Matrix               | 1.34                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.39E-01                                   |
| Am-243  | 1.18E-06                                   |
| Cs-137  | 1.45E-04                                   |
| Np-237  | 7.42E-06                                   |
| Pu-238  | 2.44E-02                                   |
| Pu-239  | 4.33E-01                                   |
| Pu-240  | 6.34E-02                                   |
| Pu-241  | 1.03E+00                                   |
| Pu-242  | 6.36E-05                                   |
| Sr-90   | 1.10E-04                                   |
| Th-229  | 7.28E-14                                   |
| Th-230  | 3.45E-10                                   |
| Th-232  | 4.64E-20                                   |
| U-233   | 7.92E-10                                   |
| U-234   | 3.84E-05                                   |
| U-235   | 9.88E-07                                   |
| U-236   | 1.88E-09                                   |
| U-238   | 3.19E-07                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D037, F001, F002, F004, F005, F006, F007, F009

## TRUCON Code(s)

111/211

## Waste Stream Description

N/A

Waste Stream ID: **LA-OS-00-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                     |                                       |            |          |    |
|-------------|--|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                                       | Final Waste Form      | Uncategorized Metal | Waste Matrix Code                     | S5111      | Handling | CH |
| Source Cat. | Discarding Excess/Expired Materials                                  | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Metal debris from Off-Site Source Recovery (OSR) project (non-mixed) |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes          |              |            |              |
|-------------------------------|--------------|------------|--------------|
| Container Type                | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner   | 0.8          | 0.0        | 0.8          |
| 55-gal POC - 12" w/ Liner     | 12.5         | 0.0        | 12.5         |
| 55-gal S100 POC - 6" w/ Liner | 104.8        | 0.0        | 104.8        |
| <b>Current Form Total</b>     | <b>118.1</b> | <b>0.0</b> | <b>118.1</b> |

| Final Form Volumes            |              |            |              |
|-------------------------------|--------------|------------|--------------|
| Container Type                | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner   | 0.8          | 0.0        | 0.8          |
| 55-gal POC - 12" w/ Liner     | 12.5         | 0.0        | 12.5         |
| 55-gal S100 POC - 6" w/ Liner | 104.8        | 0.0        | 104.8        |
| <b>Final Form Total</b>       | <b>118.1</b> | <b>0.0</b> | <b>118.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 8.46                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 1.04                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 18.31                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 341.20                               |
| Packaging Material, Plastic     | 636.83                               |
| Packaging Material, Cellulosics | 76.37                                |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.10E+02                                   |
| Cs-137  | 3.18E-02                                   |
| Np-237  | 2.14E-04                                   |
| Pu-238  | 1.02E+01                                   |
| Th-229  | 5.17E-13                                   |
| Th-230  | 4.85E-09                                   |
| U-233   | 2.76E-09                                   |
| U-234   | 1.78E-04                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

120/220

## Waste Stream Description

Off-Site Source Recovery (OSR) sealed sources are radionuclide (actinide) solids (e.g., Am, Pu, AmBe, or PuBe) that are encapsulated in metal jackets. The actinides are either metal or metal oxides.

Waste Stream ID: LA-OS-00-01.001-S

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                |                       |                 |                   |                                       |          |    |
|-------------|--------------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5100                                 | Handling | CH |
| Source Cat. | N/A                            | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                            |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes               |                    |             |
|-------------------------------|--------------------|-------------|
| Container Type                | Ref. Waste Stream  | Volume      |
| 55-gal POC - 12" w/ Liner     | WP-LA-OS-00-01.001 | 60.9        |
| 55-gal S100 POC - 6" w/ Liner | WP-LA-OS-00-01.001 | 14.8        |
| <b>Shipped Total</b>          |                    | <b>75.7</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 18.96                                |
| Other Inorganic Materials    | 0.00                                 |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 0.00                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.34E+00                                   |
| Cs-137  | 2.05E-03                                   |
| Pu-238  | 8.56E+01                                   |
| Pu-239  | 9.20E+00                                   |
| Pu-240  | 2.76E+00                                   |
| Pu-241  | 9.30E+00                                   |
| Pu-242  | 7.47E-04                                   |
| Sr-90   | 1.76E-03                                   |
| U-233   | 3.09E-09                                   |
| U-234   | 7.17E-03                                   |
| U-235   | 3.83E-07                                   |
| U-238   | 1.30E-08                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

120/220

## Waste Stream Description

N/A



Waste Stream ID: LA-OS-00-01-S

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                |                       |                 |                   |                                       |          |    |
|-------------|--------------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5100                                 | Handling | CH |
| Source Cat. | N/A                            | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                            |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes            |                   |            |
|----------------------------|-------------------|------------|
| Container Type             | Ref. Waste Stream | Volume     |
| 55-gal POC - 12" w/o Liner | WP-LA-OS-00-01    | 0.4        |
| <b>Shipped Total</b>       |                   | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 130.77                               |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.96                                 |
| Other Inorganic Materials    | 0.00                                 |
| Cellulosics                  | 137.50                               |
| Rubber                       | 0.00                                 |
| Plastics                     | 0.00                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.30E+00                                   |
| Cs-137  | 6.32E-04                                   |
| Np-237  | 3.65E-05                                   |
| Pu-238  | 4.20E+00                                   |
| Pu-239  | 1.15E+01                                   |
| Pu-240  | 1.17E+01                                   |
| Pu-241  | 1.41E+01                                   |
| Pu-242  | 2.32E-04                                   |
| Sr-90   | 5.91E-04                                   |
| Th-229  | 9.89E-14                                   |
| Th-230  | 2.24E-01                                   |
| Th-232  | 1.37E-16                                   |
| U-233   | 5.51E-10                                   |
| U-234   | 4.84E-05                                   |
| U-235   | 4.53E-08                                   |
| U-236   | 1.39E-06                                   |
| U-238   | 1.40E-13                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

120/220

## Waste Stream Description

N/A

Waste Stream ID: **LA-OS-00-03**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                     |                                       |            |          |    |
|-------------|--|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                                       | Final Waste Form      | Uncategorized Metal | Waste Matrix Code                     | S5111      | Handling | CH |
| Source Cat. | Discarding Excess/Expired Materials                                  | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Metal debris from Off-Site Source Recovery (OSR) project (non-mixed) |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 14.6        | 0.0        | 14.6        |
| <b>Current Form Total</b>   | <b>14.6</b> | <b>0.0</b> | <b>14.6</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 14.6        | 0.0        | 14.6        |
| <b>Final Form Total</b>     | <b>14.6</b> | <b>0.0</b> | <b>14.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 974.00                               |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.75E+00                                   |
| Np-237  | 3.42E-06                                   |
| Th-229  | 8.27E-15                                   |
| U-233   | 4.40E-11                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

120/220

## Waste Stream Description

Off-Site Source Recovery (OSR) sealed sources are radionuclide (actinide) solids (e.g., Am, Pu, AmBe, or PuBe) that are encapsulated in metal jackets. The actinides are either metal or metal oxides.

Waste Stream ID: LA-PX-00-01

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                        |                                       |            |          |    |
|-------------|--|-----------------------|------------------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory               | Final Waste Form      | Heterogeneous          | Waste Matrix Code                     | S5300      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents      | Defense Determination | Likely Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Combustible debris waste generated by PANTEX |                       |                        | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Current Form Total</b>   | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b>     | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 257.70                               |
| Aluminum-based Metals/Alloys    | 0.40                                 |
| Other Metals                    | 18.80                                |
| Other Inorganic Materials       | 6.80                                 |
| Cellulosics                     | 64.00                                |
| Rubber                          | 1.10                                 |
| Plastics                        | 5.30                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.69E-02                                   |
| Np-237  | 5.11E-08                                   |
| Pu-238  | 7.73E-03                                   |
| Pu-239  | 8.98E-02                                   |
| Pu-240  | 2.11E-02                                   |
| Pu-241  | 1.34E-01                                   |
| Th-229  | 3.31E-16                                   |
| Th-230  | 1.04E-11                                   |
| Th-232  | 1.55E-18                                   |
| U-233   | 1.07E-12                                   |
| U-234   | 2.28E-07                                   |
| U-235   | 8.85E-10                                   |
| U-236   | 6.27E-09                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

116/216

## Waste Stream Description

Not provided

Waste Stream ID: LA-TA-00-01

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                 | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Other/Multiple Sources                         | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Containers waiting assignment to waste streams |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |              |            |              |
|---|--------------|------------|--------------|
| Container Type                          | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner             | 22.0         | 0.0        | 22.0         |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 2.9          | 0.0        | 2.9          |
| Box - Cardboard                         | 0.2          | 0.0        | 0.2          |
| Box - Crate                             | 119.5        | 0.0        | 119.5        |
| Box - FRP                               | 154.7        | 0.0        | 154.7        |
| Other                                   | 19.4         | 0.0        | 19.4         |
| SWB w/ 4 - 55-gal Drums w/ Liners       | 1.9          | 0.0        | 1.9          |
| <b>Current Form Total</b>               | <b>320.7</b> | <b>0.0</b> | <b>320.7</b> |

| Final Form Volumes                |              |            |              |
|-----------------------------------|--------------|------------|--------------|
| Container Type                    | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner       | 24.3         | 0.0        | 24.3         |
| SWB Dir Ld w/ Liner               | 296.7        | 0.0        | 296.7        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9          | 0.0        | 1.9          |
| <b>Final Form Total</b>           | <b>323.0</b> | <b>0.0</b> | <b>323.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 20.51                                |
| Aluminum-based Metals/Alloys    | 2.80                                 |
| Other Metals                    | 2.28                                 |
| Other Inorganic Materials       | 102.54                               |
| Cellulosics                     | 2.22                                 |
| Rubber                          | 1.16                                 |
| Plastics                        | 4.59                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.18                                 |
| Organic Matrix                  | 1.09                                 |
| Soils/gravel                    | 0.18                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 152.13                               |
| Packaging Material, Plastic     | 3.99                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.07E-01                                   |
| Am-243  | 2.54E-05                                   |
| Cm-244  | 7.35E-02                                   |
| Np-237  | 1.76E-05                                   |
| Pu-238  | 1.28E+00                                   |
| Pu-239  | 3.44E-01                                   |
| Pu-240  | 6.48E-02                                   |
| Pu-241  | 2.43E-01                                   |
| Pu-242  | 3.22E-04                                   |
| Pu-244  | 3.28E-07                                   |
| Th-229  | 1.23E-08                                   |
| Th-230  | 2.40E-08                                   |
| Th-232  | 3.41E-10                                   |
| U-233   | 3.75E-06                                   |
| U-234   | 1.46E-04                                   |
| U-235   | 1.51E-08                                   |
| U-236   | 6.73E-08                                   |
| U-238   | 2.36E-07                                   |

## Haz. Waste No(s).

D008, F001, F002

## TRUCON Code(s)

111/211, 122/222

## Waste Stream Description

Miscellaneous Containers waiting assignment to waste streams

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LA-TA-00-02

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                 | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Other/Multiple Sources                         | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Containers waiting assignment to waste streams |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>     | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 289.72                               |
| Aluminum-based Metals/Alloys    | 1.17                                 |
| Other Metals                    | 34.73                                |
| Other Inorganic Materials       | 187.89                               |
| Cellulosics                     | 23.98                                |
| Rubber                          | 35.97                                |
| Plastics                        | 110.93                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 4.62                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.90E+00                                   |
| Np-237  | 9.80E-06                                   |
| Pu-238  | 1.07E+01                                   |
| Pu-239  | 5.15E-02                                   |
| Pu-240  | 8.43E-01                                   |
| Pu-241  | 9.60E+01                                   |
| Pu-242  | 5.53E-01                                   |
| Pu-244  | 7.75E-07                                   |
| Th-229  | 2.99E-14                                   |
| Th-230  | 6.97E-09                                   |
| Th-232  | 3.02E-17                                   |
| U-233   | 1.40E-10                                   |
| U-234   | 2.19E-04                                   |
| U-235   | 3.56E-10                                   |
| U-236   | 1.75E-07                                   |
| U-238   | 5.84E-10                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Not a defined waste stream Containers waiting assignment to waste streams

Waste Stream ID: **LA-TA-00-03**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                 | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | RH |
| Source Cat. | Other/Multiple Sources                         | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Containers waiting assignment to waste streams |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| Canister - (LANL-RH)      | 2.1        | 0.0        | 2.1        |
| <b>Current Form Total</b> | <b>2.1</b> | <b>0.0</b> | <b>2.1</b> |

| Final Form Volumes         |            |            |            |
|----------------------------|------------|------------|------------|
| Container Type             | Stored     | Proj.      | Total      |
| RH Can w/ Fxd Lid - Dir Ld | 1.8        | 0.0        | 1.8        |
| <b>Final Form Total</b>    | <b>1.8</b> | <b>0.0</b> | <b>1.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1310.00                              |
| Aluminum-based Metals/Alloys    | 5.30                                 |
| Other Metals                    | 157.00                               |
| Other Inorganic Materials       | 848.00                               |
| Cellulosics                     | 108.00                               |
| Rubber                          | 162.00                               |
| Plastics                        | 501.00                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 20.80                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 433.70                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 464.00                               |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-239  | 6.96E+00                                   |
| U-235   | 2.40E-07                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

## Waste Stream Description

Miscellaneous Containers waiting assignment to waste streams

Waste Stream ID: **LA-TA-03-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                 |                                       |                     |                   |            |          |    |
|-------------|---------------------------------|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory  | Final Waste Form                      | Solidified Organics | Waste Matrix Code | S3200      | Handling | CH |
| Source Cat. | Source Information Not Compiled | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Solidified Organics             | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>     | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.04                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.04                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.95                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 366.60                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.75E-01                                   |
| Np-237  | 3.20E-05                                   |
| Pu-238  | 2.48E-02                                   |
| Pu-239  | 8.82E-01                                   |
| Pu-240  | 2.09E-01                                   |
| Pu-241  | 2.39E+00                                   |
| Pu-242  | 1.18E-05                                   |
| Th-229  | 1.59E-13                                   |
| Th-230  | 8.13E-12                                   |
| Th-232  | 3.83E-18                                   |
| U-233   | 6.79E-10                                   |
| U-234   | 3.59E-07                                   |
| U-235   | 4.35E-09                                   |
| U-236   | 3.11E-08                                   |
| U-238   | 8.94E-15                                   |

## Haz. Waste No(s).

D006, D008, D009, D011, D019, D021, F001, F002, F005

## TRUCON Code(s)

112/212

## Waste Stream Description

Solidified Organics

Waste Stream ID: **LA-TA-03-03**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                 |                                       |                 |                   |            |          |    |
|-------------|---------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory  | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Source Information Not Compiled | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Combustible                     | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 13.5        | 0.0        | 13.5        |
| <b>Current Form Total</b>   | <b>13.5</b> | <b>0.0</b> | <b>13.5</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 13.5        | 0.0        | 13.5        |
| <b>Final Form Total</b>     | <b>13.5</b> | <b>0.0</b> | <b>13.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 12.35                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 4.11                                 |
| Other Inorganic Materials       | 19.90                                |
| Cellulosics                     | 15.97                                |
| Rubber                          | 1.62                                 |
| Plastics                        | 47.01                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.50E-02                                   |
| Am-243  | 6.80E-05                                   |
| Cs-137  | 1.35E-07                                   |
| Np-237  | 6.29E-05                                   |
| Pu-238  | 8.97E-01                                   |
| Pu-239  | 3.08E-01                                   |
| Pu-240  | 7.32E-02                                   |
| Pu-241  | 7.69E-01                                   |
| Pu-242  | 4.36E-06                                   |
| Sr-90   | 1.35E-07                                   |
| Th-229  | 7.61E-09                                   |
| Th-230  | 1.13E-09                                   |
| Th-232  | 2.63E-18                                   |
| U-233   | 1.89E-09                                   |
| U-234   | 2.70E-05                                   |
| U-235   | 6.18E-07                                   |
| U-236   | 1.52E-08                                   |
| U-238   | 3.56E-09                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

116/216

## Waste Stream Description

Combustible



Waste Stream ID: **LA-TA-03-04**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Metals and Miscellaneous Equipment Debris          |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Current Form Total</b>   | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b>     | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 39.20                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 13.04                                |
| Other Inorganic Materials       | 63.17                                |
| Cellulosics                     | 50.71                                |
| Rubber                          | 5.13                                 |
| Plastics                        | 149.23                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.14E-01                                   |
| Np-237  | 4.27E-05                                   |
| Pu-238  | 4.28E+00                                   |
| Pu-239  | 6.92E-01                                   |
| Pu-240  | 1.65E-01                                   |
| Pu-241  | 2.04E+00                                   |
| Pu-242  | 1.03E-05                                   |
| Th-229  | 1.35E-13                                   |
| Th-230  | 8.93E-10                                   |
| Th-232  | 1.93E-18                                   |
| U-233   | 7.23E-10                                   |
| U-234   | 4.94E-05                                   |
| U-235   | 2.73E-09                                   |
| U-236   | 1.96E-08                                   |
| U-238   | 6.24E-15                                   |

## Haz. Waste No(s).

D004, D006, D007,  
D008, D009, D011,  
F002

## TRUCON Code(s)

117/217

## Waste Stream Description

Metals and Miscellaneous Equipment Debris

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LA-TA-03-05

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Metals and Miscellaneous Equipment Debris          |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner       | 1.2        | 0.0        | 1.2        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Current Form Total</b>         | <b>3.1</b> | <b>0.0</b> | <b>3.1</b> |

| Final Form Volumes                |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner       | 1.2        | 0.0        | 1.2        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>           | <b>3.1</b> | <b>0.0</b> | <b>3.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 17.17                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 5.71                                 |
| Other Inorganic Materials       | 27.67                                |
| Cellulosics                     | 22.21                                |
| Rubber                          | 2.25                                 |
| Plastics                        | 65.37                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 179.16                               |
| Packaging Material, Plastic     | 24.53                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.22E-02                                   |
| Np-237  | 4.59E-06                                   |
| Pu-238  | 1.02E-01                                   |
| Pu-239  | 7.79E-02                                   |
| Pu-240  | 1.88E-02                                   |
| Pu-241  | 1.91E-01                                   |
| Pu-242  | 1.16E-06                                   |
| Th-229  | 4.50E-14                                   |
| Th-230  | 6.63E-11                                   |
| Th-232  | 6.73E-19                                   |
| U-233   | 1.37E-10                                   |
| U-234   | 2.09E-06                                   |
| U-235   | 4.26E-06                                   |
| U-236   | 3.89E-09                                   |
| U-238   | 1.19E-05                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

116/216, 117/217

## Waste Stream Description

Metals and Miscellaneous Equipment Debris

Waste Stream ID: **LA-TA-03-06**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Metals and Miscellaneous Equipment Debris          |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>     | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 34.40                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 11.45                                |
| Other Inorganic Materials       | 55.44                                |
| Cellulosics                     | 44.50                                |
| Rubber                          | 4.50                                 |
| Plastics                        | 130.96                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.01E+00                                   |
| Am-243  | 1.32E-03                                   |
| Np-237  | 1.53E-04                                   |
| Pu-238  | 1.20E+00                                   |
| Pu-239  | 1.44E+00                                   |
| Pu-240  | 3.43E-01                                   |
| Pu-241  | 3.92E+00                                   |
| Pu-242  | 1.97E-05                                   |
| Th-229  | 7.58E-13                                   |
| Th-230  | 3.94E-10                                   |
| Th-232  | 6.28E-18                                   |
| U-233   | 3.24E-09                                   |
| U-234   | 1.74E-05                                   |
| U-235   | 7.12E-09                                   |
| U-236   | 5.08E-08                                   |
| U-238   | 1.48E-14                                   |

## Haz. Waste No(s).

D004, D006, D007,  
D008, D009, D011,  
F001, F002, F005

## TRUCON Code(s)

118/218

## Waste Stream Description

Metals and Miscellaneous Equipment Debris

Waste Stream ID: **LA-TA-03-07**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                 |                                       |                 |                   |            |          |    |
|-------------|---------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory  | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Source Information Not Compiled | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | NonCombustible                  | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 3.7        | 0.0        | 3.7        |
| <b>Current Form Total</b>   | <b>3.7</b> | <b>0.0</b> | <b>3.7</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 3.7        | 0.0        | 3.7        |
| <b>Final Form Total</b>     | <b>3.7</b> | <b>0.0</b> | <b>3.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 24.28                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 8.08                                 |
| Other Inorganic Materials       | 39.12                                |
| Cellulosics                     | 31.40                                |
| Rubber                          | 3.18                                 |
| Plastics                        | 92.42                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.17E-02                                   |
| Am-243  | 1.26E-04                                   |
| Cs-137  | 5.36E-07                                   |
| Np-237  | 1.53E-04                                   |
| Pu-238  | 2.24E-02                                   |
| Pu-239  | 4.14E-01                                   |
| Pu-240  | 9.13E-02                                   |
| Pu-241  | 1.01E+00                                   |
| Pu-242  | 5.59E-06                                   |
| Sr-90   | 2.79E-07                                   |
| Th-229  | 1.10E-12                                   |
| Th-230  | 1.06E-11                                   |
| Th-232  | 2.41E-18                                   |
| U-233   | 3.92E-09                                   |
| U-234   | 3.91E-07                                   |
| U-235   | 1.68E-06                                   |
| U-236   | 1.63E-08                                   |
| U-238   | 1.64E-08                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

117/217

## Waste Stream Description

NonCombustible

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **LA-TA-03-08**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                 |                                       |                 |                   |            |          |    |
|-------------|---------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory  | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Source Information Not Compiled | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | NonCombustible                  | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| SWB w/ 4 - 55-gal Drums w/ Liners | 37.8        | 0.0        | 37.8        |
| <b>Current Form Total</b>         | <b>37.8</b> | <b>0.0</b> | <b>37.8</b> |

| Final Form Volumes                |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| SWB w/ 4 - 55-gal Drums w/ Liners | 37.8        | 0.0        | 37.8        |
| <b>Final Form Total</b>           | <b>37.8</b> | <b>0.0</b> | <b>37.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 15.02                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 5.00                                 |
| Other Inorganic Materials       | 24.20                                |
| Cellulosics                     | 19.43                                |
| Rubber                          | 1.96                                 |
| Plastics                        | 57.17                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 211.10                               |
| Packaging Material, Plastic     | 16.30                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.28E-03                                   |
| Am-243  | 1.70E-05                                   |
| Cs-137  | 1.28E-06                                   |
| Np-237  | 1.71E-06                                   |
| Pu-238  | 9.48E-02                                   |
| Pu-239  | 8.59E-03                                   |
| Pu-240  | 1.48E-03                                   |
| Pu-241  | 1.58E-02                                   |
| Pu-242  | 1.05E-07                                   |
| Th-229  | 2.76E-14                                   |
| Th-230  | 1.03E-10                                   |
| Th-232  | 8.80E-20                                   |
| U-233   | 6.56E-11                                   |
| U-234   | 2.51E-06                                   |
| U-235   | 5.14E-06                                   |
| U-236   | 3.96E-10                                   |
| U-238   | 1.50E-05                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

119/219

## Waste Stream Description

NonCombustible

Waste Stream ID: LA-TA-03-09

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                 |                                       |                 |                   |            |          |    |
|-------------|---------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory  | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Source Information Not Compiled | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | NonCombustible                  | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner       | 2.9         | 0.0        | 2.9         |
| Other                             | 11.3        | 0.0        | 11.3        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 18.9        | 0.0        | 18.9        |
| <b>Current Form Total</b>         | <b>33.1</b> | <b>0.0</b> | <b>33.1</b> |

| Final Form Volumes                |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner       | 2.9         | 0.0        | 2.9         |
| SWB Dir Ld w/ Liner               | 11.3        | 0.0        | 11.3        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 18.9        | 0.0        | 18.9        |
| <b>Final Form Total</b>           | <b>33.2</b> | <b>0.0</b> | <b>33.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 48.21                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 16.04                                |
| Other Inorganic Materials       | 77.70                                |
| Cellulosics                     | 62.36                                |
| Rubber                          | 6.31                                 |
| Plastics                        | 183.54                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 184.34                               |
| Packaging Material, Plastic     | 12.95                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.08E-01                                   |
| Am-243  | 1.44E-04                                   |
| Cs-137  | 1.59E-07                                   |
| Np-237  | 1.66E-03                                   |
| Pu-238  | 2.88E-01                                   |
| Pu-239  | 7.45E-01                                   |
| Pu-240  | 1.78E-01                                   |
| Pu-241  | 1.83E+00                                   |
| Pu-242  | 3.07E-04                                   |
| Pu-244  | 3.26E-10                                   |
| Th-229  | 2.72E-11                                   |
| Th-230  | 3.12E-10                                   |
| Th-232  | 1.05E-17                                   |
| U-233   | 6.44E-08                                   |
| U-234   | 7.61E-06                                   |
| U-235   | 3.46E-06                                   |
| U-236   | 4.74E-08                                   |
| U-238   | 1.20E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D021, D022, D027, D030, D032, D034, D035, D039, D040, F001, F002, F003, F004, F005

## TRUCON Code(s)

117/217, 125/225

## Waste Stream Description

NonCombustible

Waste Stream ID: LA-TA-03-10

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory          | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Source Information Not Compiled         | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Combined Combustible and NonCombustible |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |             |             |              |
|-----------------------------------|-------------|-------------|--------------|
| Container Type                    | Stored      | Proj.       | Total        |
| 55-gal Drum Dir Ld w/ Liner       | 31.6        | 50.1        | 81.7         |
| Other                             | 64.0        | 0.0         | 64.0         |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9         | 0.0         | 1.9          |
| <b>Current Form Total</b>         | <b>97.5</b> | <b>50.1</b> | <b>147.6</b> |

| Final Form Volumes                |             |             |              |
|-----------------------------------|-------------|-------------|--------------|
| Container Type                    | Stored      | Proj.       | Total        |
| 55-gal Drum Dir Ld w/ Liner       | 31.6        | 50.1        | 81.7         |
| SWB Dir Ld w/ Liner               | 64.3        | 0.0         | 64.3         |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9         | 0.0         | 1.9          |
| <b>Final Form Total</b>           | <b>97.8</b> | <b>50.1</b> | <b>147.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 19.80                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 6.59                                 |
| Other Inorganic Materials       | 31.92                                |
| Cellulosics                     | 25.62                                |
| Rubber                          | 2.59                                 |
| Plastics                        | 75.40                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 141.69                               |
| Packaging Material, Plastic     | 21.18                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.03E-02                                   |
| Am-243  | 1.30E-04                                   |
| Cs-137  | 1.17E-08                                   |
| Np-237  | 4.74E-05                                   |
| Pu-238  | 1.14E+00                                   |
| Pu-239  | 2.89E-01                                   |
| Pu-240  | 6.80E-02                                   |
| Pu-241  | 7.55E-01                                   |
| Pu-242  | 4.23E-06                                   |
| Th-229  | 3.42E-13                                   |
| Th-230  | 5.40E-10                                   |
| Th-232  | 1.79E-18                                   |
| U-233   | 1.22E-09                                   |
| U-234   | 1.99E-05                                   |
| U-235   | 2.52E-06                                   |
| U-236   | 1.21E-08                                   |
| U-238   | 2.98E-07                                   |

## Haz. Waste No(s).

D004, D006, D007,  
D008, D009, D011,  
F002

## TRUCON Code(s)

125/225

## Waste Stream Description

Combined Combustible and NonCombustible

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LA-TA-03-12

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory  | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste  | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Combustible debris waste from chemistry operations in wings 3, 5, and 7 of the CMR facility (mixed) |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |              |            |              |
|---|--------------|------------|--------------|
| Container Type                          | Stored       | Proj.      | Total        |
| 30-gal Drum                             | 0.1          | 0.0        | 0.1          |
| 55-gal Drum Dir Ld w/ Liner             | 163.1        | 0.0        | 163.1        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 54.1         | 0.0        | 54.1         |
| Cask - Misc w/ 1 - 30-gal Drum          | 0.4          | 0.0        | 0.4          |
| Other                                   | 0.4          | 0.0        | 0.4          |
| SWB w/ 4 - 55-gal Drums w/ Liners       | 1.9          | 0.0        | 1.9          |
| <b>Current Form Total</b>               | <b>220.0</b> | <b>0.0</b> | <b>220.0</b> |

| Final Form Volumes                |              |            |              |
|-----------------------------------|--------------|------------|--------------|
| Container Type                    | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner       | 198.6        | 0.0        | 198.6        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9          | 0.0        | 1.9          |
| <b>Final Form Total</b>           | <b>200.5</b> | <b>0.0</b> | <b>200.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1.20                                 |
| Aluminum-based Metals/Alloys    | 0.30                                 |
| Other Metals                    | 0.30                                 |
| Other Inorganic Materials       | 6.50                                 |
| Cellulosics                     | 18.80                                |
| Rubber                          | 8.80                                 |
| Plastics                        | 33.70                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.20                                 |
| Organic Matrix                  | 0.40                                 |
| Soils/gravel                    | 0.20                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 131.56                               |
| Packaging Material, Plastic     | 36.80                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.54E-01                                   |
| Am-243  | 7.62E-05                                   |
| Cm-244  | 1.23E-04                                   |
| Cs-137  | 1.49E-06                                   |
| Np-237  | 6.01E-06                                   |
| Pu-238  | 1.10E+00                                   |
| Pu-239  | 3.73E-01                                   |
| Pu-240  | 9.32E-02                                   |
| Pu-241  | 4.46E-01                                   |
| Pu-242  | 1.46E-04                                   |
| Pu-244  | 1.18E-10                                   |
| Sr-90   | 1.02E-06                                   |
| Th-229  | 1.23E-12                                   |
| Th-230  | 3.10E-08                                   |
| Th-232  | 5.47E-11                                   |
| U-233   | 7.91E-10                                   |
| U-234   | 1.59E-04                                   |
| U-235   | 8.93E-06                                   |
| U-236   | 1.92E-07                                   |
| U-238   | 4.56E-08                                   |

## Haz. Waste No(s).

D006, D008, D011, D022, D028, D043, F001, F002, F005

## TRUCON Code(s)

116/216

## Waste Stream Description

Combustible waste generated from facility and equipment operations and maintenance. This waste includes paper, rags, plastic, rubber, wood-based HEPA filters, and plastic-based and cellulose-based waste generated at the facility. Plastic-based waste includes, but may not be limited to, tape, polyethylene and vinyl; gloves; plastic vials; polystyrene; Tygon tubing; polyvinyl chloride plastic; Teflon products; Plexiglas; and dry box gloves (unleaded neoprene base). Cellulose-based waste includes, but may not be limited to, rags, wood, paper, cardboard, laboratory coats and coveralls, booties and cotton gloves, and similar materials. The waste stream may also contain a smaller fraction of non-combustible solids (e.g., scrap metal, crucibles, metal lids, zippers, discarded tools) and a small fraction of homogenous solids, salts, leached solids, ash, hydroxide cakes, crucibles, impure oxides.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.



Waste Stream ID: LA-TA-03-13

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Combustible debris waste from chemistry operations |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 23.3        | 0.0        | 23.3        |
| <b>Current Form Total</b>   | <b>23.3</b> | <b>0.0</b> | <b>23.3</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 23.3        | 0.0        | 23.3        |
| <b>Final Form Total</b>     | <b>23.3</b> | <b>0.0</b> | <b>23.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 257.70                               |
| Aluminum-based Metals/Alloys    | 0.33                                 |
| Other Metals                    | 69.58                                |
| Other Inorganic Materials       | 6.80                                 |
| Cellulosics                     | 52.56                                |
| Rubber                          | 0.90                                 |
| Plastics                        | 4.35                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.65E-01                                   |
| Am-243  | 7.27E-06                                   |
| Cs-137  | 1.10E-06                                   |
| Np-237  | 2.81E-05                                   |
| Pu-238  | 2.52E+00                                   |
| Pu-239  | 8.99E-01                                   |
| Pu-240  | 2.06E-01                                   |
| Pu-241  | 1.18E+00                                   |
| Pu-242  | 1.54E-05                                   |
| Sr-90   | 9.86E-07                                   |
| Th-229  | 1.26E-12                                   |
| Th-230  | 2.54E-08                                   |
| Th-232  | 1.45E-16                                   |
| U-233   | 1.80E-09                                   |
| U-234   | 2.44E-04                                   |
| U-235   | 3.21E-06                                   |
| U-236   | 2.41E-07                                   |
| U-238   | 1.21E-08                                   |

## Haz. Waste No(s).

D008, D022, D043, F001, F002, F005

## TRUCON Code(s)

116/216, 125/225

## Waste Stream Description

Combustible debris waste from chemistry operations in wings 3, 5, and 7 of the CMR facility (non-mixed). Combustible waste generated from facility and equipment operations and maintenance. This waste includes paper, rags, plastic, rubber, wood-based HEPA filters, and plastic-based and cellulose-based waste generated at the facility. Plastic-based waste includes, but may not be limited to, tape, polyethylene and vinyl; gloves; plastic vials; polystyrene; Tygon tubing; polyvinyl chloride plastic; Teflon products; Plexiglas; and dry box gloves (unleaded neoprene base). Cellulose-based waste includes, but may not be limited to, rags, wood, paper, cardboard, laboratory coats and coveralls, booties and cotton gloves, and similar materials. The waste stream may also contain a smaller fraction of non-combustible solids (e.g., scrap metal, crucibles, metal lids, zippers, discarded tools) and a small fraction of homogenous solids, salts, leached solids, ash, hydroxide cakes, crucibles, impure oxides. Major: R, C, PW, Minor: IM, OM, AM, OI, OR, IN. No soil (S) present in this waste stream.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LA-TA-03-14

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Metals and Miscellaneous Equipment Debris          |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                     |             |            |             |
|--|-------------|------------|-------------|
| Container Type                           | Stored      | Proj.      | Total       |
| 110-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.4         | 0.0        | 0.4         |
| 55-gal Drum Dir Ld w/ Liner              | 29.7        | 0.0        | 29.7        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner  | 9.0         | 0.0        | 9.0         |
| Box - Crate                              | 19.8        | 0.0        | 19.8        |
| Other                                    | 0.0         | 0.0        | 0.0         |
| <b>Current Form Total</b>                | <b>59.0</b> | <b>0.0</b> | <b>59.0</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 36.0        | 0.0        | 36.0        |
| SWB Dir Ld w/ Liner         | 20.8        | 0.0        | 20.8        |
| <b>Final Form Total</b>     | <b>56.8</b> | <b>0.0</b> | <b>56.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 25.25                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 8.40                                 |
| Other Inorganic Materials       | 40.70                                |
| Cellulosics                     | 32.67                                |
| Rubber                          | 3.30                                 |
| Plastics                        | 96.14                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 139.11                               |
| Packaging Material, Plastic     | 23.89                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.52E-01                                   |
| Am-243  | 8.76E-05                                   |
| Cs-137  | 1.67E-04                                   |
| Np-237  | 8.47E-06                                   |
| Pu-238  | 1.67E+00                                   |
| Pu-239  | 2.83E-01                                   |
| Pu-240  | 7.56E-02                                   |
| Pu-241  | 3.21E-01                                   |
| Pu-242  | 1.99E-04                                   |
| Pu-244  | 1.77E-10                                   |
| Sr-90   | 2.43E-03                                   |
| Th-229  | 1.84E-12                                   |
| Th-230  | 3.66E-08                                   |
| Th-232  | 1.91E-16                                   |
| U-233   | 1.16E-09                                   |
| U-234   | 2.07E-04                                   |
| U-235   | 2.84E-06                                   |
| U-236   | 1.50E-07                                   |
| U-238   | 8.84E-08                                   |

## Haz. Waste No(s).

D005, D006, D007, D008, D009, D010, D011, D022, D043, F001, F002, F003, F004, F005

## TRUCON Code(s)

117/217

## Waste Stream Description

Metals and Miscellaneous Equipment Debris

Waste Stream ID: LA-TA-03-15

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Metals and Miscellaneous Equipment Debris          |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 8.9        | 0.0        | 8.9        |
| <b>Current Form Total</b>   | <b>8.9</b> | <b>0.0</b> | <b>8.9</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 8.9        | 0.0        | 8.9        |
| <b>Final Form Total</b>     | <b>8.9</b> | <b>0.0</b> | <b>8.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 28.23                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 9.39                                 |
| Other Inorganic Materials       | 45.49                                |
| Cellulosics                     | 36.51                                |
| Rubber                          | 3.69                                 |
| Plastics                        | 107.46                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.58E-01                                   |
| Am-243  | 5.57E-04                                   |
| Cs-137  | 1.05E-06                                   |
| Np-237  | 1.48E-05                                   |
| Pu-238  | 8.93E-01                                   |
| Pu-239  | 2.15E-01                                   |
| Pu-240  | 5.12E-02                                   |
| Pu-241  | 4.14E-01                                   |
| Pu-242  | 2.53E-04                                   |
| Pu-244  | 1.95E-10                                   |
| Sr-90   | 1.07E-06                                   |
| Th-229  | 6.52E-13                                   |
| Th-230  | 5.60E-09                                   |
| Th-232  | 6.27E-17                                   |
| U-233   | 9.35E-10                                   |
| U-234   | 6.13E-05                                   |
| U-235   | 6.56E-07                                   |
| U-236   | 9.60E-08                                   |
| U-238   | 9.45E-08                                   |

## Haz. Waste No(s).

D006, D008, D011,  
D022, D043, F001,  
F002, F005

## TRUCON Code(s)

117/217

## Waste Stream Description

Metals and Miscellaneous Equipment Debris

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LA-TA-03-16

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                 |                                       |                 |                   |            |          |    |
|-------------|---------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory  | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Source Information Not Compiled | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Glass                           | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |             |            |             |
|---|-------------|------------|-------------|
| Container Type                          | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner             | 20.0        | 0.0        | 20.0        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 12.9        | 0.0        | 12.9        |
| <b>Current Form Total</b>               | <b>32.8</b> | <b>0.0</b> | <b>32.8</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 28.3        | 0.0        | 28.3        |
| <b>Final Form Total</b>     | <b>28.3</b> | <b>0.0</b> | <b>28.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 19.35                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 6.44                                 |
| Other Inorganic Materials       | 31.18                                |
| Cellulosics                     | 25.03                                |
| Rubber                          | 2.53                                 |
| Plastics                        | 73.66                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.31E-01                                   |
| Np-237  | 3.40E-05                                   |
| Pu-238  | 4.30E-01                                   |
| Pu-239  | 5.04E-01                                   |
| Pu-240  | 2.02E-01                                   |
| Pu-241  | 1.84E+00                                   |
| Pu-242  | 5.82E-05                                   |
| Th-229  | 3.93E-12                                   |
| Th-230  | 4.87E-09                                   |
| Th-232  | 8.55E-17                                   |
| U-233   | 3.50E-09                                   |
| U-234   | 3.81E-05                                   |
| U-235   | 1.19E-08                                   |
| U-236   | 1.44E-07                                   |
| U-238   | 2.11E-13                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Glass

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **LA-TA-03-18**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                 |                                       |                 |                   |            |          |    |
|-------------|---------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory  | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Source Information Not Compiled | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Isotopic Source                 | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |            |            |            |
|---|------------|------------|------------|
| Container Type                          | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner             | 0.2        | 0.0        | 0.2        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.3        | 0.0        | 0.3        |
| Other                                   | 0.0        | 0.0        | 0.0        |
| <b>Current Form Total</b>               | <b>0.5</b> | <b>0.0</b> | <b>0.5</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b>     | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 106.67                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 35.50                                |
| Other Inorganic Materials       | 171.91                               |
| Cellulosics                     | 137.98                               |
| Rubber                          | 13.96                                |
| Plastics                        | 406.10                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Cm-244  | 7.11E+01                                   |
| Pu-239  | 9.99E-03                                   |
| Pu-240  | 5.25E-01                                   |
| Th-232  | 1.97E-16                                   |
| U-235   | 3.35E-10                                   |
| U-236   | 3.21E-07                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Isotopic Source

Waste Stream ID: LA-TA-03-19

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory   | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste                               | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Non-combustible and combustible debris waste from operations of the CMR facility |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |             |            |             |
|---|-------------|------------|-------------|
| Container Type                          | Stored      | Proj.      | Total       |
| 30-gal Drum                             | 4.1         | 0.0        | 4.1         |
| 55-gal Drum Dir Ld w/ Liner             | 39.5        | 0.0        | 39.5        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 5.8         | 0.0        | 5.8         |
| Cask - Misc w/ 1 - 30-gal Drum          | 0.4         | 0.0        | 0.4         |
| Other                                   | 0.0         | 0.0        | 0.0         |
| <b>Current Form Total</b>               | <b>49.8</b> | <b>0.0</b> | <b>49.8</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 51.2        | 0.0        | 51.2        |
| <b>Final Form Total</b>     | <b>51.2</b> | <b>0.0</b> | <b>51.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 20.10                                |
| Aluminum-based Metals/Alloys    | 2.70                                 |
| Other Metals                    | 2.20                                 |
| Other Inorganic Materials       | 100.50                               |
| Cellulosics                     | 2.20                                 |
| Rubber                          | 1.10                                 |
| Plastics                        | 4.50                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.20                                 |
| Organic Matrix                  | 1.10                                 |
| Soils/gravel                    | 0.20                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.55E-02                                   |
| Cs-137  | 9.91E-07                                   |
| Np-237  | 7.23E-07                                   |
| Pu-238  | 8.59E-01                                   |
| Pu-239  | 8.57E-02                                   |
| Pu-240  | 2.90E-02                                   |
| Pu-241  | 1.71E-01                                   |
| Pu-242  | 9.88E-06                                   |
| Sr-90   | 9.92E-07                                   |
| Th-229  | 1.43E-13                                   |
| Th-230  | 1.62E-08                                   |
| Th-232  | 2.60E-17                                   |
| U-233   | 9.20E-11                                   |
| U-234   | 9.83E-05                                   |
| U-235   | 2.96E-09                                   |
| U-236   | 3.01E-08                                   |
| U-238   | 5.22E-14                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Non-combustible and combustible debris waste from operations in wings 3, 5, and 7 of the CMR facility (mixed). Combined Non-combustible and combustible waste generated from facility and equipment operations and maintenance. This waste includes, but may not be limited to, small tools, small equipment, cans, motors, pumps, process equipment, gloveboxes, ventilation ductwork, HEPA filters, pipes, glass, graphite, slag and crucibles, salt, discarded lab ware, windows, and bottles. The waste stream may also contain a smaller fraction of combustible solids (e.g., paper, rags, plastic, rubber, leaded gloves) and a small fraction of homogeneous solids (e.g., leached solids, ash, hydroxide cakes, impure oxides).

Waste Stream ID: **LA-TA-03-20**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                                       | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste                   | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Combustible debris waste from chemistry and metallurgical operations |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |             |            |             |
|---|-------------|------------|-------------|
| Container Type                          | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner             | 17.9        | 0.0        | 17.9        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 10.3        | 0.0        | 10.3        |
| <b>Current Form Total</b>               | <b>28.2</b> | <b>0.0</b> | <b>28.2</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 24.5        | 0.0        | 24.5        |
| <b>Final Form Total</b>     | <b>24.5</b> | <b>0.0</b> | <b>24.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 3.31                                 |
| Aluminum-based Metals/Alloys    | 0.64                                 |
| Other Metals                    | 0.57                                 |
| Other Inorganic Materials       | 1.77                                 |
| Cellulosics                     | 19.70                                |
| Rubber                          | 9.41                                 |
| Plastics                        | 32.47                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.46                                 |
| Organic Matrix                  | 2.06                                 |
| Soils/gravel                    | 0.37                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.43E-02                                   |
| Np-237  | 5.98E-05                                   |
| Pu-238  | 1.86E+01                                   |
| Pu-239  | 2.68E-01                                   |
| Pu-240  | 7.71E-02                                   |
| Pu-241  | 4.45E-01                                   |
| Pu-242  | 1.43E-05                                   |
| Th-229  | 1.02E-11                                   |
| Th-230  | 2.38E-07                                   |
| Th-232  | 4.76E-17                                   |
| U-233   | 7.51E-09                                   |
| U-234   | 1.74E-03                                   |
| U-235   | 7.67E-09                                   |
| U-236   | 6.64E-08                                   |
| U-238   | 6.25E-14                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

116/216

## Waste Stream Description

Combustible debris waste from chemistry and metallurgical operations in wings 2 and 4 of the CMR facility (mixed). Combustible waste generated from facility and equipment operations and maintenance. This waste includes paper, rags, plastic, rubber, wood-based HEPA filters, and plastic-based and cellulose-based waste generated at the facility. Plastic-based waste includes, but may not be limited to, tape, polyethylene and vinyl; gloves; plastic vials; polystyrene; Tygon tubing; polyvinyl chloride plastic; Teflon products; Plexiglas; and dry box gloves (unleaded neoprene base). Cellulose-based waste includes, but may not be limited to, rags, wood, paper, cardboard, laboratory coats and coveralls, booties and cotton gloves, and similar materials. The waste stream may also contain a smaller fraction of non-combustible solids (e.g., scrap metal, crucibles, metal lids, zippers, discarded tools) and a small fraction of homogenous solids, salts, leached solids, ash, hydroxide cakes, crucibles, impure oxides.

Waste Stream ID: **LA-TA-03-21**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Metals and Miscellaneous Equipment Debris          |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |             |            |             |
|---|-------------|------------|-------------|
| Container Type                          | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner             | 2.5         | 0.0        | 2.5         |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 2.6         | 0.0        | 2.6         |
| Box - Crate                             | 93.4        | 0.0        | 93.4        |
| <b>Current Form Total</b>               | <b>98.5</b> | <b>0.0</b> | <b>98.5</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 4.2         | 0.0        | 4.2         |
| SWB Dir Ld w/ Liner         | 94.5        | 0.0        | 94.5        |
| <b>Final Form Total</b>     | <b>98.7</b> | <b>0.0</b> | <b>98.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 25.18                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 8.38                                 |
| Other Inorganic Materials       | 40.58                                |
| Cellulosics                     | 32.57                                |
| Rubber                          | 3.29                                 |
| Plastics                        | 95.86                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 152.54                               |
| Packaging Material, Plastic     | 2.71                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.85E-03                                   |
| Np-237  | 2.35E-06                                   |
| Pu-238  | 2.66E-01                                   |
| Pu-239  | 3.70E-02                                   |
| Pu-240  | 9.30E-03                                   |
| Pu-241  | 3.15E-02                                   |
| Pu-242  | 9.58E-07                                   |
| Th-229  | 5.45E-13                                   |
| Th-230  | 4.70E-09                                   |
| Th-232  | 7.89E-18                                   |
| U-233   | 3.43E-10                                   |
| U-234   | 2.94E-05                                   |
| U-235   | 1.24E-09                                   |
| U-236   | 9.38E-09                                   |
| U-238   | 4.91E-15                                   |

## Haz. Waste No(s).

D008, D019, D040

## TRUCON Code(s)

117/217

## Waste Stream Description

Metals and Miscellaneous Equipment Debris



Waste Stream ID: **LA-TA-03-23**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Hepa Filters                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |             |            |             |
|---|-------------|------------|-------------|
| Container Type                          | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner             | 0.2         | 0.0        | 0.2         |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.6         | 0.0        | 0.6         |
| Box - Crate                             | 66.4        | 0.0        | 66.4        |
| <b>Current Form Total</b>               | <b>67.3</b> | <b>0.0</b> | <b>67.3</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 0.6         | 0.0        | 0.6         |
| SWB Dir Ld w/ Liner         | 68.0        | 0.0        | 68.0        |
| <b>Final Form Total</b>     | <b>68.7</b> | <b>0.0</b> | <b>68.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 27.12                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 9.03                                 |
| Other Inorganic Materials       | 43.71                                |
| Cellulosics                     | 35.08                                |
| Rubber                          | 3.55                                 |
| Plastics                        | 103.25                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.29                               |
| Packaging Material, Plastic     | 1.53                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.62E-04                                   |
| Np-237  | 1.11E-09                                   |
| Pu-238  | 2.20E-02                                   |
| Pu-239  | 1.70E-03                                   |
| Pu-240  | 4.00E-04                                   |
| Pu-241  | 1.29E-03                                   |
| Pu-242  | 2.68E-08                                   |
| Th-229  | 4.92E-17                                   |
| Th-230  | 3.64E-10                                   |
| Th-232  | 3.19E-19                                   |
| U-233   | 5.94E-14                                   |
| U-234   | 2.35E-06                                   |
| U-235   | 5.54E-11                                   |
| U-236   | 3.91E-10                                   |
| U-238   | 1.34E-16                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Hepa Filters

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **LA-TA-03-24**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory   | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste                               | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Non-combustible and combustible debris waste from operations of the CMR facility |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |            |            |            |
|---|------------|------------|------------|
| Container Type                          | Stored     | Proj.      | Total      |
| 30-gal Drum                             | 0.3        | 0.0        | 0.3        |
| 55-gal Drum Dir Ld w/ Liner             | 7.1        | 0.0        | 7.1        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 2.3        | 0.0        | 2.3        |
| Other                                   | 0.0        | 0.0        | 0.0        |
| <b>Current Form Total</b>               | <b>9.7</b> | <b>0.0</b> | <b>9.7</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 9.4        | 0.0        | 9.4        |
| <b>Final Form Total</b>     | <b>9.4</b> | <b>0.0</b> | <b>9.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 40.10                                |
| Aluminum-based Metals/Alloys    | 4.00                                 |
| Other Metals                    | 3.20                                 |
| Other Inorganic Materials       | 13.40                                |
| Cellulosics                     | 5.50                                 |
| Rubber                          | 2.80                                 |
| Plastics                        | 8.90                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.20                                 |
| Organic Matrix                  | 0.20                                 |
| Soils/gravel                    | 0.20                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.46E-01                                   |
| Np-237  | 4.10E-05                                   |
| Pu-238  | 1.06E+00                                   |
| Pu-239  | 1.07E+00                                   |
| Pu-240  | 3.66E-01                                   |
| Pu-241  | 1.74E+00                                   |
| Pu-242  | 8.34E-05                                   |
| Th-229  | 9.86E-12                                   |
| Th-230  | 2.00E-08                                   |
| Th-232  | 3.29E-16                                   |
| U-233   | 6.06E-09                                   |
| U-234   | 1.21E-04                                   |
| U-235   | 3.69E-08                                   |
| U-236   | 3.80E-07                                   |
| U-238   | 4.40E-13                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Non-combustible and combustible debris waste from operations in wings 2 and 4 of the CMR facility (mixed). Combined Combustible and Non-combustible waste generated from facility and equipment operations and maintenance. This waste includes, but may not be limited to, small tools, small equipment, cans, motors, pumps, process equipment, gloveboxes, ventilation ductwork, HEPA filters, pipes, glass, graphite, slag and crucibles, salt, discarded lab ware, windows, and bottles. The waste stream may also contain a smaller fraction of combustible solids (e.g., paper, rags, plastic, rubber, leaded gloves) and a small fraction of homogeneous solids (e.g., leached solids, ash, hydroxide cakes, impure oxides).

Waste Stream ID: LA-TA-03-25

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                  | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Source Information Not Compiled                 | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Inorganic Solid (Miscellaneous Glovebox Debris) | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |            |            |            |
|---|------------|------------|------------|
| Container Type                          | Stored     | Proj.      | Total      |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.3        | 0.0        | 0.3        |
| <b>Current Form Total</b>               | <b>0.3</b> | <b>0.0</b> | <b>0.3</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>     | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 10.01                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 3.33                                 |
| Other Inorganic Materials       | 16.13                                |
| Cellulosics                     | 12.94                                |
| Rubber                          | 1.31                                 |
| Plastics                        | 38.09                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.83E-02                                   |
| Np-237  | 6.55E-08                                   |
| Pu-238  | 6.67E-03                                   |
| Pu-239  | 2.63E-01                                   |
| Pu-240  | 6.16E-02                                   |
| Pu-241  | 3.74E-01                                   |
| Pu-242  | 3.56E-06                                   |
| Th-229  | 9.00E-16                                   |
| Th-230  | 3.40E-11                                   |
| Th-232  | 1.63E-17                                   |
| U-233   | 1.93E-12                                   |
| U-234   | 3.88E-07                                   |
| U-235   | 4.93E-09                                   |
| U-236   | 3.47E-08                                   |
| U-238   | 1.02E-14                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Inorganic Solid (Miscellaneous Glovebox Debris)

Waste Stream ID: **LA-TA-03-26**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory  | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste  | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Non-combustible and combustible hot cell debris waste from wing 9 of the CMR facility (mixed) |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                     |            |            |            |
|--|------------|------------|------------|
| Container Type                           | Stored     | Proj.      | Total      |
| 110-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.4        | 0.0        | 0.4        |
| 55-gal Drum Dir Ld w/ Liner              | 2.5        | 0.0        | 2.5        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner  | 4.2        | 0.0        | 4.2        |
| Other                                    | 1.0        | 0.0        | 1.0        |
| <b>Current Form Total</b>                | <b>8.0</b> | <b>0.0</b> | <b>8.0</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 6.7        | 0.0        | 6.7        |
| <b>Final Form Total</b>     | <b>6.7</b> | <b>0.0</b> | <b>6.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 20.70                                |
| Aluminum-based Metals/Alloys    | 4.20                                 |
| Other Metals                    | 3.50                                 |
| Other Inorganic Materials       | 6.40                                 |
| Cellulosics                     | 7.20                                 |
| Rubber                          | 3.60                                 |
| Plastics                        | 11.10                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.20                                 |
| Organic Matrix                  | 0.20                                 |
| Soils/gravel                    | 0.20                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.10E-02                                   |
| Np-237  | 4.45E-07                                   |
| Pu-238  | 2.19E+00                                   |
| Pu-239  | 7.01E+00                                   |
| Pu-240  | 1.51E-01                                   |
| Pu-241  | 4.31E-01                                   |
| Pu-242  | 9.11E-06                                   |
| Th-229  | 2.25E-14                                   |
| Th-230  | 9.03E-07                                   |
| Th-232  | 2.04E-14                                   |
| U-233   | 2.55E-11                                   |
| U-234   | 2.99E-03                                   |
| U-235   | 5.61E-04                                   |
| U-236   | 1.19E-05                                   |
| U-238   | 7.98E-07                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Contact-handled hot cell waste, including both combustible and noncombustible waste forms, generated from facility and equipment operations and maintenance.

Waste Stream ID: **LA-TA-03-27**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory  | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | RH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste                                | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Combined combustible and noncombustible debris waste (RH-TRU) of the CMR facility |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                     |             |            |             |
|--|-------------|------------|-------------|
| Container Type                           | Stored      | Proj.      | Total       |
| Canister - (LANL-RH)                     | 0.1         | 0.0        | 0.1         |
| Canister - (LANL-RH)                     | 1.3         | 0.0        | 1.3         |
| Canister - (LANL-RH)                     | 18.4        | 0.0        | 18.4        |
| Canister - (LANL-RH)                     | 51.0        | 0.0        | 51.0        |
| RH Can w/ Fxd Lid w/ 3 - 55-gal w/ Liner | 15.1        | 0.0        | 15.1        |
| <b>Current Form Total</b>                | <b>85.9</b> | <b>0.0</b> | <b>85.9</b> |

| Final Form Volumes                       |             |            |             |
|--|-------------|------------|-------------|
| Container Type                           | Stored      | Proj.      | Total       |
| RH Can w/ Fxd Lid w/ 3 - 55-gal w/ Liner | 15.1        | 0.0        | 15.1        |
| RH Can w/ Remov Lid - Dir Ld             | 81.0        | 0.0        | 81.0        |
| <b>Final Form Total</b>                  | <b>96.1</b> | <b>0.0</b> | <b>96.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 260.60                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 249.93                               |
| Other Inorganic Materials       | 5.48                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 555.06                               |
| Packaging Material, Plastic     | 4.09                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 73.04                                |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.26E-02                                   |
| Cs-137  | 1.66E+01                                   |
| Np-237  | 1.21E-07                                   |
| Pu-238  | 1.33E-02                                   |
| Pu-239  | 2.42E+00                                   |
| Pu-240  | 2.63E-02                                   |
| Pu-241  | 2.61E-01                                   |
| Pu-242  | 1.58E-05                                   |
| Sr-90   | 1.49E+01                                   |
| Th-229  | 3.51E-15                                   |
| Th-230  | 4.54E-09                                   |
| Th-232  | 1.27E-16                                   |
| U-233   | 5.23E-12                                   |
| U-234   | 1.92E-05                                   |
| U-235   | 9.68E-05                                   |
| U-236   | 1.05E-07                                   |
| U-238   | 4.25E-07                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

117/217

## Waste Stream Description

Combined combustible and noncombustible debris waste (RH-TRU) from wing 9 of the CMR facility (mixed). Combined Combustible and non-combustible remote handled waste (RH-TRU). This waste stream contains both combustible and non-combustible waste that is classified as "remotely handled". Combustible waste is generated from facility and equipment operations and maintenance. Combustible waste includes paper, rags, plastic, rubber, and plastic-based and cellulose-based waste generated at the facility. Plastic based waste includes, but may not be limited to, tape, polyethylene, and vinyl; gloves; plastic vials; polystyrene; Tygon tubing; polyvinyl chloride plastic; Teflon products; plexiglass; and dry box gloves (unleaded Neoprene base). Cellulose-based waste includes, but may not be limited to, rags, wood, paper, cardboard, laboratory coats and coveralls, booties and cotton gloves, and similar materials. Noncombustible scrap waste is also generated from facility and equipment operations and maintenance. Noncombustible waste includes items such as small tools, cans, small equipment items, and broken glass. This waste consists of glass waste including, but not limited to, discarded labware, windows, and bottles; metal waste including motors, pumps, tools, and process equipment; leaded rubber, and metal waste including lead-lined glovebox gloves discarded along with metal waste, such as motors and tools.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **LA-TA-03-28**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3120      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Cement paste from CMR building (mixed)             | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |            |            |            |
|---|------------|------------|------------|
| Container Type                          | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner             | 4.0        | 0.0        | 4.0        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 3.2        | 0.0        | 3.2        |
| <b>Current Form Total</b>               | <b>7.2</b> | <b>0.0</b> | <b>7.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 6.0        | 0.0        | 6.0        |
| <b>Final Form Total</b>     | <b>6.0</b> | <b>0.0</b> | <b>6.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.18                                 |
| Aluminum-based Metals/Alloys    | 0.18                                 |
| Other Metals                    | 0.18                                 |
| Other Inorganic Materials       | 0.18                                 |
| Cellulosics                     | 0.18                                 |
| Rubber                          | 0.18                                 |
| Plastics                        | 0.18                                 |
| Cements                         | 693.00                               |
| Inorganic Matrix                | 165.82                               |
| Organic Matrix                  | 828.39                               |
| Soils/gravel                    | 110.61                               |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.66E-02                                   |
| Np-237  | 5.53E-07                                   |
| Pu-238  | 4.71E-01                                   |
| Pu-239  | 6.89E-01                                   |
| Pu-240  | 1.27E-01                                   |
| Pu-241  | 5.41E-01                                   |
| Pu-242  | 1.77E-05                                   |
| Th-229  | 2.69E-14                                   |
| Th-230  | 7.30E-09                                   |
| Th-232  | 9.57E-17                                   |
| U-233   | 3.12E-11                                   |
| U-234   | 4.87E-05                                   |
| U-235   | 2.18E-08                                   |
| U-236   | 1.21E-07                                   |
| U-238   | 8.56E-14                                   |

## Haz. Waste No(s).

D007, D019, F001, F002

## TRUCON Code(s)

126/226

## Waste Stream Description

Cement Past Solidified aqueous waste and cemented sludge generated from facility and equipment operations and maintenance. The sludge is a residue from numerous treatment and filtration operations involving aqueous liquid radioactive waste. This treatment produces a thin sludge (approximately 25 percent solids) that is alkaline and is compatible with Portland cement. Final cemented waste monoliths are produced by mixing the waste in 55-gallon steel drums containing empirically determined quantities of sludge, Portland cement, vermiculite, and sodium silicate.

Waste Stream ID: **LA-TA-03-29**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory          | Final Waste Form      | Soils           | Waste Matrix Code                     | S4100      | Handling | CH |
| Source Cat. | Remediation/D&D Waste                   | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Plutonium contaminated soil (non-mixed) |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |            |            |            |
|---|------------|------------|------------|
| Container Type                          | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner             | 0.2        | 0.0        | 0.2        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.3        | 0.0        | 0.3        |
| <b>Current Form Total</b>               | <b>0.5</b> | <b>0.0</b> | <b>0.5</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b>     | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1.15                                 |
| Aluminum-based Metals/Alloys    | 0.45                                 |
| Other Metals                    | 0.50                                 |
| Other Inorganic Materials       | 0.18                                 |
| Cellulosics                     | 2.43                                 |
| Rubber                          | 1.27                                 |
| Plastics                        | 3.56                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 14.47                                |
| Organic Matrix                  | 76.26                                |
| Soils/gravel                    | 10.55                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.48E-01                                   |
| Np-237  | 7.26E-07                                   |
| Pu-238  | 4.43E+02                                   |
| Pu-239  | 2.70E-01                                   |
| Pu-240  | 1.06E-01                                   |
| Pu-241  | 1.95E+00                                   |
| Pu-242  | 7.59E-05                                   |
| Th-229  | 1.78E-14                                   |
| Th-230  | 4.03E-06                                   |
| Th-232  | 4.85E-17                                   |
| U-233   | 2.88E-11                                   |
| U-234   | 3.47E-02                                   |
| U-235   | 6.67E-09                                   |
| U-236   | 7.85E-08                                   |
| U-238   | 2.87E-13                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

111/211

## Waste Stream Description

Plutonium Contaminated Soil Soils contaminated with transuranic material.

Waste Stream ID: **LA-TA-03-30**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                     |                   |            |          |    |
|-------------|--|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Solidified Organics | Waste Matrix Code | S3200      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Absorbed Organics on vermiculite (mixed)           | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| 30-gal Drum                       | 0.1        | 0.0        | 0.1        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 7.6        | 0.0        | 7.6        |
| <b>Current Form Total</b>         | <b>7.7</b> | <b>0.0</b> | <b>7.7</b> |

| Final Form Volumes                |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner       | 0.2        | 0.0        | 0.2        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 7.6        | 0.0        | 7.6        |
| <b>Final Form Total</b>           | <b>7.8</b> | <b>0.0</b> | <b>7.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 195.07                               |
| Aluminum-based Metals/Alloys    | 0.29                                 |
| Other Metals                    | 14.44                                |
| Other Inorganic Materials       | 15.71                                |
| Cellulosics                     | 48.37                                |
| Rubber                          | 0.83                                 |
| Plastics                        | 4.01                                 |
| Cements                         | 124.06                               |
| Inorganic Matrix                | 110.70                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 208.95                               |
| Packaging Material, Plastic     | 16.85                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.15E-02                                   |
| Am-243  | 1.89E-07                                   |
| Cs-137  | 8.54E-07                                   |
| Np-237  | 2.78E-07                                   |
| Pu-238  | 8.89E-03                                   |
| Pu-239  | 6.84E-03                                   |
| Pu-240  | 2.17E-03                                   |
| Pu-241  | 7.45E-03                                   |
| Pu-242  | 1.25E-07                                   |
| Th-229  | 4.15E-14                                   |
| Th-230  | 1.38E-10                                   |
| Th-232  | 1.63E-18                                   |
| U-233   | 3.04E-11                                   |
| U-234   | 9.18E-07                                   |
| U-235   | 4.50E-08                                   |
| U-236   | 2.06E-09                                   |
| U-238   | 6.04E-16                                   |

## Haz. Waste No(s).

D008, D009

## TRUCON Code(s)

125/225

## Waste Stream Description

Absorbed Organics on Vermiculite Organic liquids (solvents and oils) generated from facility and equipment operations and maintenance and absorbed on vermiculite.



Waste Stream ID: **LA-TA-03-31**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                                       |            |          |    |
|-------------|---|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                      | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3100      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste  | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Cemented inorganics, leached process solids (mixed) |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>     | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 43.30                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 508.10                               |
| Inorganic Matrix                | 453.40                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.17E-01                                   |
| Np-237  | 1.67E-06                                   |
| Pu-238  | 1.41E-01                                   |
| Pu-239  | 5.65E+00                                   |
| Pu-240  | 1.32E+00                                   |
| Pu-241  | 7.29E+00                                   |
| Pu-242  | 7.64E-05                                   |
| Th-229  | 2.83E-14                                   |
| Th-230  | 8.87E-10                                   |
| Th-232  | 4.27E-16                                   |
| U-233   | 5.49E-11                                   |
| U-234   | 9.14E-06                                   |
| U-235   | 1.17E-07                                   |
| U-236   | 8.24E-07                                   |
| U-238   | 2.42E-13                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

111/211

## Waste Stream Description

Cemented Inorganics (Leached Process Solids) Solidified inorganic process solids generated from facility and equipment operations and maintenance. This waste consists of process leached solids, ash, filter cakes, salts, metal oxides, fines, and evaporator bottoms stabilized in Portland or gypsum cement.

Waste Stream ID: **LA-TA-03-32**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                 |                                       |                 |                   |            |          |    |
|-------------|---------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory  | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Source Information Not Compiled | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Non-combustibles                | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| Other                     | 0.0        | 0.0        | 0.0        |
| <b>Current Form Total</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>     | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 87.92                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 29.26                                |
| Other Inorganic Materials       | 141.70                               |
| Cellulosics                     | 113.73                               |
| Rubber                          | 11.50                                |
| Plastics                        | 334.73                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-239  | 8.55E-01                                   |
| U-235   | 1.11E-04                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Non-combustibles

Waste Stream ID: **LA-TA-03-33**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory            | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Source Information Not Compiled           | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Special Items Requiring Tracking by CST-7 |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| 30-gal Drum                       | 0.1        | 0.0        | 0.1        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Current Form Total</b>         | <b>2.0</b> | <b>0.0</b> | <b>2.0</b> |

| Final Form Volumes                |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner       | 0.2        | 0.0        | 0.2        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>           | <b>2.1</b> | <b>0.0</b> | <b>2.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 5.37                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 1.79                                 |
| Other Inorganic Materials       | 8.66                                 |
| Cellulosics                     | 6.95                                 |
| Rubber                          | 0.70                                 |
| Plastics                        | 20.45                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 203.14                               |
| Packaging Material, Plastic     | 18.35                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.30E-04                                   |
| Cs-137  | 4.66E-07                                   |
| Np-237  | 8.79E-05                                   |
| Th-229  | 1.95E-11                                   |
| Th-230  | 7.91E-14                                   |
| U-233   | 1.26E-08                                   |
| U-234   | 5.33E-10                                   |
| U-238   | 5.72E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Special Items Requiring Tracking by CST-7

Waste Stream ID: **LA-TA-03-34**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Inorganic Solid (Miscellaneous Glovebox Debris)    |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| Box - FRP                         | 19.8        | 0.0        | 19.8        |
| Other                             | 15.6        | 0.0        | 15.6        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9         | 0.0        | 1.9         |
| <b>Current Form Total</b>         | <b>37.3</b> | <b>0.0</b> | <b>37.3</b> |

| Final Form Volumes                |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner               | 37.8        | 0.0        | 37.8        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9         | 0.0        | 1.9         |
| <b>Final Form Total</b>           | <b>39.7</b> | <b>0.0</b> | <b>39.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 2.93                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.97                                 |
| Other Inorganic Materials       | 4.72                                 |
| Cellulosics                     | 3.78                                 |
| Rubber                          | 0.38                                 |
| Plastics                        | 11.14                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 156.24                               |
| Packaging Material, Plastic     | 1.92                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.87E-04                                   |
| Cs-137  | 3.32E-09                                   |
| Np-237  | 1.48E-09                                   |
| Pu-238  | 7.56E-02                                   |
| Pu-239  | 9.67E-04                                   |
| Pu-240  | 1.08E-04                                   |
| Pu-241  | 7.66E-04                                   |
| Pu-242  | 6.25E-09                                   |
| Th-229  | 1.43E-17                                   |
| Th-230  | 1.48E-10                                   |
| Th-232  | 1.14E-20                                   |
| U-233   | 3.82E-14                                   |
| U-234   | 2.70E-06                                   |
| U-235   | 6.70E-08                                   |
| U-236   | 3.85E-11                                   |
| U-238   | 1.55E-07                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Inorganic Solid (Miscellaneous Glovebox Debris)

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **LA-TA-03-40**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                              | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Remediation/D&D Waste                                       | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Metals debris generated from D&D activities in CMR Building |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Box - Crate               | 27.9        | 0.0        | 27.9        |
| <b>Current Form Total</b> | <b>27.9</b> | <b>0.0</b> | <b>27.9</b> |

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner     | 28.4        | 0.0        | 28.4        |
| <b>Final Form Total</b> | <b>28.4</b> | <b>0.0</b> | <b>28.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 272.38                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 30.28                                |
| Other Inorganic Materials       | 6.79                                 |
| Cellulosics                     | 63.95                                |
| Rubber                          | 1.10                                 |
| Plastics                        | 5.20                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 1.20                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-238  | 1.98E-02                                   |
| Pu-239  | 2.67E-01                                   |
| Th-230  | 1.96E-10                                   |
| U-234   | 1.62E-06                                   |
| U-235   | 1.09E-06                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

125/225

## Waste Stream Description

Metals debris generated from decontamination and decommissioning activities in Wings 2, 3, 4, and 7 of CMR Building (mix). This waste consists mostly of metals or metal equipment, either whole or sectioned, and small volumes of combustibles generated during decommissioning, sectioning, and packaging. The waste forms primarily include gloveboxes, tools, cans, motors, pumps, decommissioned process equipment, and ductwork

Waste Stream ID: **LA-TA-03-42**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory  | Final Waste Form      | Filter          | Waste Matrix Code                     | S5410      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste                            | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | HEPA filter debris waste from wings 2, 3, 4, 5, and 7 of CMR Building (mixed) |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Box - Crate               | 61.2        | 0.0        | 61.2        |
| Box - FRP                 | 33.4        | 0.0        | 33.4        |
| <b>Current Form Total</b> | <b>94.6</b> | <b>0.0</b> | <b>94.6</b> |

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner     | 96.4        | 0.0        | 96.4        |
| <b>Final Form Total</b> | <b>96.4</b> | <b>0.0</b> | <b>96.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 258.31                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 291.75                               |
| Other Inorganic Materials       | 6.80                                 |
| Cellulosics                     | 2.62                                 |
| Rubber                          | 0.04                                 |
| Plastics                        | 0.22                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 1.20                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.96E-05                                   |
| Np-237  | 1.58E-10                                   |
| Pu-238  | 1.28E-03                                   |
| Pu-239  | 6.24E-03                                   |
| Pu-240  | 8.24E-05                                   |
| Pu-241  | 3.41E-04                                   |
| Pu-242  | 4.77E-09                                   |
| Th-229  | 4.59E-18                                   |
| Th-230  | 1.38E-11                                   |
| Th-232  | 4.40E-20                                   |
| U-233   | 6.83E-15                                   |
| U-234   | 1.10E-07                                   |
| U-235   | 1.66E-10                                   |
| U-236   | 6.61E-11                                   |
| U-238   | 1.94E-17                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

111/211

## Waste Stream Description

HEPA filter waste generated from facility and equipment operations and maintenance. A small fraction of combustible waste, such as plastics (mainly packaging), may also be present in this waste stream.

Waste Stream ID: LA-TA-21-05

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Graphite   | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 30-gal Drum                 | 0.1        | 0.0        | 0.1        |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.3</b> | <b>0.0</b> | <b>0.3</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b>     | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 103.90                               |
| Aluminum-based Metals/Alloys    | 0.42                                 |
| Other Metals                    | 12.45                                |
| Other Inorganic Materials       | 67.36                                |
| Cellulosics                     | 8.60                                 |
| Rubber                          | 12.89                                |
| Plastics                        | 39.77                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.66                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.41E-01                                   |
| Np-237  | 1.64E-06                                   |
| Pu-238  | 6.01E-02                                   |
| Pu-239  | 2.50E+00                                   |
| Pu-240  | 5.97E-01                                   |
| Pu-241  | 1.91E+00                                   |
| Pu-242  | 4.01E-05                                   |
| Th-229  | 7.30E-14                                   |
| Th-230  | 9.95E-10                                   |
| Th-232  | 4.77E-16                                   |
| U-233   | 8.80E-11                                   |
| U-234   | 6.43E-06                                   |
| U-235   | 4.72E-05                                   |
| U-236   | 5.85E-07                                   |
| U-238   | 2.00E-13                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

115/215

## Waste Stream Description

Graphite

Waste Stream ID: LA-TA-21-06

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Combustible debris waste (mixed)                   | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                     |              |            |              |
|--|--------------|------------|--------------|
| Container Type                           | Stored       | Proj.      | Total        |
| 110-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.8          | 0.0        | 0.8          |
| 30-gal Drum                              | 16.6         | 0.0        | 16.6         |
| 55-gal Drum Dir Ld w/ Liner              | 187.8        | 0.0        | 187.8        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner  | 1.3          | 0.0        | 1.3          |
| Cask - Misc w/ 2 - 30-gal Drums          | 81.4         | 0.0        | 81.4         |
| SWB w/ 4 - 55-gal Drums w/ Liners        | 1.9          | 0.0        | 1.9          |
| <b>Current Form Total</b>                | <b>289.9</b> | <b>0.0</b> | <b>289.9</b> |

| Final Form Volumes                |              |            |              |
|-----------------------------------|--------------|------------|--------------|
| Container Type                    | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner       | 255.0        | 0.0        | 255.0        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9          | 0.0        | 1.9          |
| <b>Final Form Total</b>           | <b>256.9</b> | <b>0.0</b> | <b>256.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 257.70                               |
| Aluminum-based Metals/Alloys    | 0.40                                 |
| Other Metals                    | 18.80                                |
| Other Inorganic Materials       | 6.80                                 |
| Cellulosics                     | 64.00                                |
| Rubber                          | 1.10                                 |
| Plastics                        | 5.30                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 131.39                               |
| Packaging Material, Plastic     | 36.85                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.40E-01                                   |
| Np-237  | 9.52E-07                                   |
| Pu-238  | 5.80E+01                                   |
| Pu-239  | 7.94E-01                                   |
| Pu-240  | 2.40E-01                                   |
| Pu-241  | 1.11E+00                                   |
| Pu-242  | 4.38E-05                                   |
| Th-229  | 4.24E-14                                   |
| Th-230  | 9.60E-07                                   |
| Th-232  | 1.92E-16                                   |
| U-233   | 5.11E-11                                   |
| U-234   | 6.20E-03                                   |
| U-235   | 3.65E-06                                   |
| U-236   | 2.36E-07                                   |
| U-238   | 2.18E-13                                   |

## Haz. Waste No(s).

F001, F002

## TRUCON Code(s)

125/225

## Waste Stream Description

Combustible waste generated from facility and equipment operations and maintenance. This waste includes paper, rags, plastic, rubber, wood-based HEPA filters, and plastic-based and cellulose-based waste generated at the facility. Plastic-based waste includes, but may not be limited to, tape, polyethylene and vinyl; gloves; plastic vials; polystyrene; Tygon tubing; polyvinyl chloride plastic; Teflon products; Plexiglas; and dry box gloves (unleaded neoprene base). Cellulose-based waste includes, but may not be limited to, rags, wood, paper, cardboard, laboratory coats and coveralls, booties and cotton gloves, and similar materials. The waste stream may also contain a smaller fraction of non-combustible solids (e.g., scrap metal, crucibles, metal lids, zippers, discarded tools) and a small fraction of homogenous solids, salts, leached solids, ash, hydroxide cakes, crucibles, impure oxides.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.



Waste Stream ID: **LA-TA-21-07**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Metal  | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |              |            |              |
|---|--------------|------------|--------------|
| Container Type                          | Stored       | Proj.      | Total        |
| 15-gal Drum                             | 0.7          | 0.0        | 0.7          |
| 2-gal Drum (RH)                         | 0.0          | 0.0        | 0.0          |
| 30-gal Drum                             | 6.4          | 0.0        | 6.4          |
| 55-gal Drum Dir Ld w/ Liner             | 68.2         | 0.0        | 68.2         |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 1.0          | 0.0        | 1.0          |
| Box - Crate                             | 488.2        | 0.0        | 488.2        |
| Box - FRP                               | 14.2         | 0.0        | 14.2         |
| Cask - Misc w/ 2 - 30-gal Drums         | 47.0         | 0.0        | 47.0         |
| Other                                   | 70.9         | 0.0        | 70.9         |
| <b>Current Form Total</b>               | <b>696.7</b> | <b>0.0</b> | <b>696.7</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 102.1        | 0.0        | 102.1        |
| 55-gal POC - 12" w/ Liner   | 0.2          | 0.0        | 0.2          |
| SWB Dir Ld w/ Liner         | 576.5        | 0.0        | 576.5        |
| <b>Final Form Total</b>     | <b>678.8</b> | <b>0.0</b> | <b>678.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 13.03                                |
| Aluminum-based Metals/Alloys    | 0.05                                 |
| Other Metals                    | 1.56                                 |
| Other Inorganic Materials       | 8.45                                 |
| Cellulosics                     | 1.08                                 |
| Rubber                          | 1.62                                 |
| Plastics                        | 4.99                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.21                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 150.20                               |
| Packaging Material, Plastic     | 6.60                                 |
| Packaging Material, Cellulosics | 0.04                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.56E-02                                   |
| Am-243  | 5.99E-15                                   |
| Np-237  | 1.87E-07                                   |
| Pu-238  | 1.57E+01                                   |
| Pu-239  | 3.01E-01                                   |
| Pu-240  | 5.78E-02                                   |
| Pu-241  | 1.81E-01                                   |
| Pu-242  | 5.02E-06                                   |
| Th-229  | 9.48E-15                                   |
| Th-230  | 2.96E-07                                   |
| Th-232  | 5.19E-17                                   |
| U-233   | 1.07E-11                                   |
| U-234   | 1.80E-03                                   |
| U-235   | 5.48E-08                                   |
| U-236   | 6.01E-08                                   |
| U-238   | 2.95E-06                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

117/217

## Waste Stream Description

Metal

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LA-TA-21-08

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Glass  | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |            |            |            |
|---|------------|------------|------------|
| Container Type                          | Stored     | Proj.      | Total      |
| 30-gal Drum                             | 0.3        | 0.0        | 0.3        |
| 55-gal Drum Dir Ld w/ Liner             | 2.5        | 0.0        | 2.5        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.3        | 0.0        | 0.3        |
| Cask - Misc w/ 1 - 30-gal Drum          | 1.1        | 0.0        | 1.1        |
| <b>Current Form Total</b>               | <b>4.3</b> | <b>0.0</b> | <b>4.3</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 3.5        | 0.0        | 3.5        |
| <b>Final Form Total</b>     | <b>3.5</b> | <b>0.0</b> | <b>3.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 44.40                                |
| Aluminum-based Metals/Alloys    | 0.18                                 |
| Other Metals                    | 5.32                                 |
| Other Inorganic Materials       | 28.80                                |
| Cellulosics                     | 3.67                                 |
| Rubber                          | 5.51                                 |
| Plastics                        | 17.00                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.71                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.14E-01                                   |
| Np-237  | 7.77E-07                                   |
| Pu-238  | 2.56E+01                                   |
| Pu-239  | 7.64E-01                                   |
| Pu-240  | 2.15E-01                                   |
| Pu-241  | 9.09E-01                                   |
| Pu-242  | 3.18E-05                                   |
| Th-229  | 3.47E-14                                   |
| Th-230  | 4.23E-07                                   |
| Th-232  | 1.71E-16                                   |
| U-233   | 4.18E-11                                   |
| U-234   | 2.73E-03                                   |
| U-235   | 2.49E-08                                   |
| U-236   | 2.10E-07                                   |
| U-238   | 1.58E-13                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

118/218

## Waste Stream Description

Glass

Waste Stream ID: LA-TA-21-09

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Hepa Filters                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |            |            |            |
|---|------------|------------|------------|
| Container Type                          | Stored     | Proj.      | Total      |
| 30-gal Drum                             | 0.1        | 0.0        | 0.1        |
| 55-gal Drum Dir Ld w/ Liner             | 0.6        | 0.0        | 0.6        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.3        | 0.0        | 0.3        |
| Cask - Misc w/ 2 - 30-gal Drums         | 7.4        | 0.0        | 7.4        |
| <b>Current Form Total</b>               | <b>8.5</b> | <b>0.0</b> | <b>8.5</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 4.4        | 0.0        | 4.4        |
| <b>Final Form Total</b>     | <b>4.4</b> | <b>0.0</b> | <b>4.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 4.72                                 |
| Aluminum-based Metals/Alloys    | 0.02                                 |
| Other Metals                    | 0.57                                 |
| Other Inorganic Materials       | 3.06                                 |
| Cellulosics                     | 0.39                                 |
| Rubber                          | 0.59                                 |
| Plastics                        | 1.81                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.08                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.13E-02                                   |
| Np-237  | 1.71E-05                                   |
| Pu-238  | 3.40E+02                                   |
| Pu-239  | 8.21E-02                                   |
| Pu-240  | 1.92E-02                                   |
| Pu-241  | 5.95E-02                                   |
| Pu-242  | 9.04E-05                                   |
| Th-229  | 3.66E-12                                   |
| Th-230  | 5.63E-06                                   |
| Th-232  | 1.53E-17                                   |
| U-233   | 2.39E-09                                   |
| U-234   | 3.64E-02                                   |
| U-235   | 2.67E-09                                   |
| U-236   | 1.88E-08                                   |
| U-238   | 4.50E-13                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

119/219

## Waste Stream Description

Hepa Filters

Waste Stream ID: LA-TA-21-10

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                 |                                       |                 |                   |            |          |    |
|-------------|---------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory  | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Source Information Not Compiled | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Isotopic Source                 | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| Box - Crate               | 0.1        | 0.0        | 0.1        |
| <b>Current Form Total</b> | <b>0.1</b> | <b>0.0</b> | <b>0.1</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>     | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 64.42                                |
| Aluminum-based Metals/Alloys    | 0.26                                 |
| Other Metals                    | 7.72                                 |
| Other Inorganic Materials       | 41.78                                |
| Cellulosics                     | 5.33                                 |
| Rubber                          | 8.00                                 |
| Plastics                        | 24.67                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.03                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-239  | 2.42E+00                                   |
| U-235   | 7.40E-08                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Isotopic Source

Waste Stream ID: LA-TA-21-11

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                |                       |                 |                                       |            |          |    |
|-------------|--------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Remediation/D&D Waste          | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | NonCombustible Building Debris |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Box - Crate               | 19.1        | 0.0        | 19.1        |
| Other                     | 2.1         | 0.0        | 2.1         |
| <b>Current Form Total</b> | <b>21.2</b> | <b>0.0</b> | <b>21.2</b> |

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner     | 24.6        | 0.0        | 24.6        |
| <b>Final Form Total</b> | <b>24.6</b> | <b>0.0</b> | <b>24.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 61.06                                |
| Aluminum-based Metals/Alloys    | 0.25                                 |
| Other Metals                    | 7.32                                 |
| Other Inorganic Materials       | 39.60                                |
| Cellulosics                     | 5.05                                 |
| Rubber                          | 7.58                                 |
| Plastics                        | 23.38                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.97                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 1.20                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-238  | 2.12E-02                                   |
| Pu-239  | 8.60E-01                                   |
| Th-230  | 3.74E-10                                   |
| U-234   | 2.34E-06                                   |
| U-235   | 2.89E-08                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

NonCombustible Building Debris

Waste Stream ID: LA-TA-21-12

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                       | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste   | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Non-combustible and combustible debris waste (mixed) |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |              |            |              |
|---|--------------|------------|--------------|
| Container Type                          | Stored       | Proj.      | Total        |
| 15-gal Drum                             | 0.6          | 0.0        | 0.6          |
| 30-gal Drum                             | 3.7          | 0.0        | 3.7          |
| 55-gal Drum Dir Ld w/ Liner             | 114.0        | 0.0        | 114.0        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 1.3          | 0.0        | 1.3          |
| Box - Crate                             | 6.3          | 0.0        | 6.3          |
| Cask - Misc w/ 2 - 30-gal Drums         | 121.8        | 0.0        | 121.8        |
| <b>Current Form Total</b>               | <b>247.7</b> | <b>0.0</b> | <b>247.7</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 195.3        | 0.0        | 195.3        |
| SWB Dir Ld w/ Liner         | 7.6          | 0.0        | 7.6          |
| <b>Final Form Total</b>     | <b>202.9</b> | <b>0.0</b> | <b>202.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1.40                                 |
| Aluminum-based Metals/Alloys    | 0.20                                 |
| Other Metals                    | 0.20                                 |
| Other Inorganic Materials       | 0.20                                 |
| Cellulosics                     | 21.20                                |
| Rubber                          | 8.50                                 |
| Plastics                        | 35.80                                |
| Cements                         | 514.40                               |
| Inorganic Matrix                | 0.20                                 |
| Organic Matrix                  | 0.20                                 |
| Soils/gravel                    | 0.20                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 131.65                               |
| Packaging Material, Plastic     | 35.67                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.28E-01                                   |
| Np-237  | 2.27E-06                                   |
| Pu-238  | 2.19E+02                                   |
| Pu-239  | 1.36E+00                                   |
| Pu-240  | 4.49E-01                                   |
| Pu-241  | 2.52E+00                                   |
| Pu-242  | 1.13E-04                                   |
| Th-229  | 6.16E-04                                   |
| Th-230  | 3.39E-06                                   |
| Th-232  | 3.37E-16                                   |
| U-233   | 2.06E-01                                   |
| U-234   | 2.26E-02                                   |
| U-235   | 1.02E-05                                   |
| U-236   | 4.26E-07                                   |
| U-238   | 5.44E-13                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Combined Combustible and NonCombustible Trash Non-combustible and combustible waste generated from facility and equipment operations and maintenance. This waste includes, but may not be limited to, small tools, small equipment, cans, motors, pumps, process equipment, gloveboxes, ventilation ductwork, HEPA filters, pipes, glass, graphite, slag and crucibles, salt, discarded lab ware, windows, and bottles. The waste stream may also contain a smaller fraction of combustible solids (e.g., paper, rags, plastic, rubber, leaded gloves) and a small fraction of homogeneous solids (e.g., leached solids, ash, hydroxide cakes, impure oxides).

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LA-TA-21-13

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3100      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Cemented wastewater treatment sludge (mixed)       | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |               |            |               |
|---|---------------|------------|---------------|
| Container Type                          | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner             | 16.0          | 0.0        | 16.0          |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.3           | 0.0        | 0.3           |
| Other                                   | 2917.3        | 0.0        | 2917.3        |
| <b>Current Form Total</b>               | <b>2933.7</b> | <b>0.0</b> | <b>2933.7</b> |

| Final Form Volumes          |               |            |               |
|-----------------------------|---------------|------------|---------------|
| Container Type              | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner | 16.2          | 0.0        | 16.2          |
| SWB Dir Ld w/ Liner         | 2918.2        | 0.0        | 2918.2        |
| <b>Final Form Total</b>     | <b>2934.4</b> | <b>0.0</b> | <b>2934.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 693.00                               |
| Inorganic Matrix                | 603.00                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.37                               |
| Packaging Material, Plastic     | 1.40                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.40E+00                                   |
| Np-237  | 5.13E-05                                   |
| Pu-238  | 6.19E-02                                   |
| Pu-239  | 4.20E-02                                   |
| Th-229  | 4.32E-12                                   |
| Th-230  | 1.84E-09                                   |
| Th-232  | 3.74E-08                                   |
| U-233   | 3.94E-09                                   |
| U-234   | 9.21E-06                                   |
| U-235   | 8.18E-06                                   |
| U-238   | 3.80E-06                                   |

## Haz. Waste No(s).

D007, F001, F002

## TRUCON Code(s)

111/211

## Waste Stream Description

Cemented Wastewater Treatment Sludge Solidified aqueous waste generated from facility and equipment operations and maintenance. Solidified aqueous waste is a dewatered sludge generated by the vacuum filtration of solids from treated aqueous waste slurry. The filter media (diatomaceous earth) with the entrapped filtrate is then placed in drums with dry concreted absorbent.

Waste Stream ID: LA-TA-21-14

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory          | Final Waste Form      | Soils           | Waste Matrix Code                     | S4100      | Handling | CH |
| Source Cat. | Remediation/D&D Waste                   | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Plutonium contaminated soil (non-mixed) |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 7.9         | 0.0        | 7.9         |
| Box - Crate                 | 73.2        | 0.0        | 73.2        |
| Box - FRP                   | 3.2         | 0.0        | 3.2         |
| <b>Current Form Total</b>   | <b>84.3</b> | <b>0.0</b> | <b>84.3</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 7.9         | 0.0        | 7.9         |
| SWB Dir Ld w/ Liner         | 77.5        | 0.0        | 77.5        |
| <b>Final Form Total</b>     | <b>85.4</b> | <b>0.0</b> | <b>85.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 55.61                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 6.18                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 955.21                               |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 151.40                               |
| Packaging Material, Plastic     | 4.51                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-239  | 1.09E-01                                   |
| U-235   | 3.01E-09                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

111/211

## Waste Stream Description

Plutonium Contaminated Soils contaminated with transuranic material.



Waste Stream ID: LA-TA-21-15

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                     |                                       |            |          |    |
|-------------|--|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Solidified Organics | Waste Matrix Code                     | S3200      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Solidified organics (mixed)                        |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 30-gal Drum                 | 0.2        | 0.0        | 0.2        |
| 55-gal Drum Dir Ld w/ Liner | 3.1        | 0.0        | 3.1        |
| <b>Current Form Total</b>   | <b>3.3</b> | <b>0.0</b> | <b>3.3</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 3.5        | 0.0        | 3.5        |
| <b>Final Form Total</b>     | <b>3.5</b> | <b>0.0</b> | <b>3.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 250.98                               |
| Aluminum-based Metals/Alloys    | 0.39                                 |
| Other Metals                    | 18.31                                |
| Other Inorganic Materials       | 7.75                                 |
| Cellulosics                     | 62.33                                |
| Rubber                          | 1.07                                 |
| Plastics                        | 5.16                                 |
| Cements                         | 13.41                                |
| Inorganic Matrix                | 11.65                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.89E-02                                   |
| Np-237  | 5.83E-07                                   |
| Pu-238  | 2.26E-02                                   |
| Pu-239  | 1.34E+00                                   |
| Pu-240  | 2.31E-01                                   |
| Pu-241  | 7.50E-01                                   |
| Pu-242  | 1.34E-05                                   |
| Th-229  | 2.43E-14                                   |
| Th-230  | 3.50E-10                                   |
| Th-232  | 1.73E-16                                   |
| U-233   | 3.03E-11                                   |
| U-234   | 2.33E-06                                   |
| U-235   | 4.22E-08                                   |
| U-236   | 2.19E-07                                   |
| U-238   | 6.45E-14                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

112/212

## Waste Stream Description

Solidified Organic liquids generated from facility and equipment operations and maintenance and absorbed on vermiculite.

Waste Stream ID: LA-TA-21-16

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3100      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Cemented inorganics (mixed)                        | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |             |            |             |
|---|-------------|------------|-------------|
| Container Type                          | Stored      | Proj.      | Total       |
| 30-gal Drum                             | 26.2        | 0.0        | 26.2        |
| 55-gal Drum Dir Ld w/ Liner             | 31.4        | 0.0        | 31.4        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.3         | 0.0        | 0.3         |
| <b>Current Form Total</b>               | <b>57.9</b> | <b>0.0</b> | <b>57.9</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 79.9        | 0.0        | 79.9        |
| <b>Final Form Total</b>     | <b>79.9</b> | <b>0.0</b> | <b>79.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 43.30                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 508.10                               |
| Inorganic Matrix                | 453.40                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.94E-01                                   |
| Np-237  | 5.23E-06                                   |
| Pu-238  | 2.61E-01                                   |
| Pu-239  | 7.93E+00                                   |
| Pu-240  | 1.89E+00                                   |
| Pu-241  | 6.65E+00                                   |
| Pu-242  | 1.55E-04                                   |
| Th-229  | 2.20E-13                                   |
| Th-230  | 4.04E-09                                   |
| Th-232  | 1.42E-15                                   |
| U-233   | 2.73E-10                                   |
| U-234   | 2.69E-05                                   |
| U-235   | 4.15E-05                                   |
| U-236   | 1.80E-06                                   |
| U-238   | 7.51E-13                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

111/211

## Waste Stream Description

Cemented Inorganics Solidified inorganic process solids generated from facility and equipment operations and maintenance. This waste consists of process leached solids, ash, filter cakes, salts, metal oxides, fines, or evaporator bottoms stabilized in Portland or gypsum cement.

Waste Stream ID: LA-TA-21-17

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory            | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Source Information Not Compiled           | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Special Items Requiring Tracking by CST-7 | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 30-gal Drum                 | 0.1        | 0.0        | 0.1        |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Current Form Total</b>   | <b>0.5</b> | <b>0.0</b> | <b>0.5</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b>     | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 58.49                                |
| Aluminum-based Metals/Alloys    | 0.24                                 |
| Other Metals                    | 7.01                                 |
| Other Inorganic Materials       | 37.93                                |
| Cellulosics                     | 4.84                                 |
| Rubber                          | 7.26                                 |
| Plastics                        | 22.40                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.93                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.85E-03                                   |
| Np-237  | 2.62E-08                                   |
| Pu-238  | 9.58E-04                                   |
| Pu-239  | 4.22E-02                                   |
| Pu-240  | 9.86E-03                                   |
| Pu-241  | 3.06E-02                                   |
| Pu-242  | 5.71E-07                                   |
| Th-229  | 1.17E-15                                   |
| Th-230  | 1.59E-11                                   |
| Th-232  | 7.88E-18                                   |
| U-233   | 1.41E-12                                   |
| U-234   | 1.03E-07                                   |
| U-235   | 1.37E-09                                   |
| U-236   | 9.67E-09                                   |
| U-238   | 2.84E-15                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Special Items Requiring Tracking by CST-7

Waste Stream ID: **LA-TA-21-18**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Miscellaneous Glovebox Debris                      | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Box - FRP                 | 14.8        | 0.0        | 14.8        |
| <b>Current Form Total</b> | <b>14.8</b> | <b>0.0</b> | <b>14.8</b> |

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner     | 15.1        | 0.0        | 15.1        |
| <b>Final Form Total</b> | <b>15.1</b> | <b>0.0</b> | <b>15.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 1.20                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.02E+00                                   |
| Np-237  | 1.38E-04                                   |
| Pu-238  | 1.68E+00                                   |
| Pu-239  | 8.55E+00                                   |
| Pu-240  | 3.42E+00                                   |
| Pu-241  | 4.71E+01                                   |
| Pu-242  | 1.90E-05                                   |
| Th-229  | 1.53E-11                                   |
| Th-230  | 1.81E-08                                   |
| Th-232  | 1.83E-15                                   |
| U-233   | 1.30E-08                                   |
| U-234   | 1.44E-04                                   |
| U-235   | 2.28E-07                                   |
| U-236   | 2.74E-06                                   |
| U-238   | 7.76E-14                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

125/225

## Waste Stream Description

Miscellaneous Glovebox Debris

Waste Stream ID: LA-TA-21-40

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                |                                       |                 |                   |            |          |    |
|-------------|--------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Remediation/D&D Waste          | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Metal debris (mixed)           | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |               |            |               |
|---|---------------|------------|---------------|
| Container Type                          | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner             | 0.2           | 0.0        | 0.2           |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 1.6           | 0.0        | 1.6           |
| Box - Crate                             | 637.2         | 0.0        | 637.2         |
| Box - FRP                               | 441.1         | 0.0        | 441.1         |
| SWB w/ 4 - 55-gal Drums w/ Liners       | 15.1          | 0.0        | 15.1          |
| <b>Current Form Total</b>               | <b>1095.2</b> | <b>0.0</b> | <b>1095.2</b> |

| Final Form Volumes                |               |            |               |
|-----------------------------------|---------------|------------|---------------|
| Container Type                    | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner       | 1.2           | 0.0        | 1.2           |
| SWB Dir Ld w/ Liner               | 1081.1        | 0.0        | 1081.1        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 15.1          | 0.0        | 15.1          |
| <b>Final Form Total</b>           | <b>1097.4</b> | <b>0.0</b> | <b>1097.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 272.60                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 30.30                                |
| Other Inorganic Materials       | 6.80                                 |
| Cellulosics                     | 64.00                                |
| Rubber                          | 1.10                                 |
| Plastics                        | 5.20                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 154.27                               |
| Packaging Material, Plastic     | 1.45                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.06E-04                                   |
| Cs-137  | 5.08E-10                                   |
| Np-237  | 1.59E-08                                   |
| Pu-238  | 1.24E+00                                   |
| Pu-239  | 3.05E-01                                   |
| Pu-240  | 8.08E-04                                   |
| Pu-241  | 1.40E-03                                   |
| Pu-242  | 4.69E-08                                   |
| Pu-244  | 1.59E-07                                   |
| Sr-90   | 3.21E-09                                   |
| Th-229  | 1.19E-11                                   |
| Th-230  | 1.33E-08                                   |
| Th-232  | 4.32E-19                                   |
| U-233   | 4.72E-09                                   |
| U-234   | 1.06E-04                                   |
| U-235   | 8.12E-09                                   |
| U-236   | 6.48E-10                                   |
| U-238   | 1.24E-09                                   |

## Haz. Waste No(s).

D004, D006, D007,  
D008, D009

## TRUCON Code(s)

125/225

## Waste Stream Description

Mixed metal scrap, discarded gloveboxes, and incidental combustible waste generated from facility and equipment decontamination and decommissioning at TA21. This waste consists mostly of metals or metal equipment, either whole or sectioned, gloveboxes, glovebox equipment, glass, and small volumes of combustibles generated during decommissioning. This waste may also include items such as small tools, cans, motors, and pumps. Gloveboxes may include gloves, wiring, plastic, glass windows, plastic wrapping, and lead shielding.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **LA-TA-21-41**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory          | Final Waste Form      | Soils           | Waste Matrix Code                     | S4100      | Handling | CH |
| Source Cat. | Remediation/D&D Waste                   | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Plutonium-contaminated soil (non-mixed) |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Box - Crate               | 22.5        | 0.0        | 22.5        |
| <b>Current Form Total</b> | <b>22.5</b> | <b>0.0</b> | <b>22.5</b> |

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner     | 22.7        | 0.0        | 22.7        |
| <b>Final Form Total</b> | <b>22.7</b> | <b>0.0</b> | <b>22.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 272.60                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 30.30                                |
| Other Inorganic Materials       | 6.80                                 |
| Cellulosics                     | 64.00                                |
| Rubber                          | 1.10                                 |
| Plastics                        | 5.30                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 1.20                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-239  | 8.06E-01                                   |
| U-235   | 2.15E-08                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

111/211

## Waste Stream Description

Soils contaminated with transuranic material resulting from TA21 decontamination and decommissioning.

Waste Stream ID: **LA-TA-21-42**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                |                                       |                 |                   |            |          |    |
|-------------|--------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Remediation/D&D Waste          | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Metal debris (nonmixed)        | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |              |            |              |
|---------------------------|--------------|------------|--------------|
| Container Type            | Stored       | Proj.      | Total        |
| Box - Crate               | 91.4         | 0.0        | 91.4         |
| Box - FRP                 | 9.7          | 0.0        | 9.7          |
| <b>Current Form Total</b> | <b>101.2</b> | <b>0.0</b> | <b>101.2</b> |

| Final Form Volumes      |              |            |              |
|-------------------------|--------------|------------|--------------|
| Container Type          | Stored       | Proj.      | Total        |
| SWB Dir Ld w/ Liner     | 104.0        | 0.0        | 104.0        |
| <b>Final Form Total</b> | <b>104.0</b> | <b>0.0</b> | <b>104.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 264.04                               |
| Aluminum-based Metals/Alloys    | 0.23                                 |
| Other Metals                    | 23.76                                |
| Other Inorganic Materials       | 6.80                                 |
| Cellulosics                     | 63.98                                |
| Rubber                          | 1.10                                 |
| Plastics                        | 5.26                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 1.20                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.08E-02                                   |
| Np-237  | 1.87E-06                                   |
| Pu-238  | 4.35E-02                                   |
| Pu-239  | 2.03E-01                                   |
| Pu-241  | 1.47E-01                                   |
| Th-229  | 2.18E-13                                   |
| Th-230  | 4.67E-10                                   |
| U-233   | 1.84E-10                                   |
| U-234   | 3.72E-06                                   |
| U-235   | 4.10E-07                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Metal scrap, discarded gloveboxes, and incidental combustible waste generated from facility and equipment decontamination and decommissioning at TA21. This waste consists mostly of metals or metal equipment, either whole or sectioned gloveboxes, glovebox equipment, glass, and small volumes of combustibles generated during decommissioning. This waste may also include items such as small tools, cans, motors, and pumps. Gloveboxes may include gloves, wiring, plastic, glass windows, and plastic wrapping.

Waste Stream ID: **LA-TA-48-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Combustible and noncombustible debris (non-mixed)  |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 8.3        | 0.0        | 8.3        |
| <b>Current Form Total</b>   | <b>8.3</b> | <b>0.0</b> | <b>8.3</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 8.3        | 0.0        | 8.3        |
| <b>Final Form Total</b>     | <b>8.3</b> | <b>0.0</b> | <b>8.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 253.95                               |
| Aluminum-based Metals/Alloys    | 0.22                                 |
| Other Metals                    | 143.89                               |
| Other Inorganic Materials       | 7.33                                 |
| Cellulosics                     | 34.83                                |
| Rubber                          | 0.60                                 |
| Plastics                        | 2.88                                 |
| Cements                         | 7.49                                 |
| Inorganic Matrix                | 6.51                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.52E-02                                   |
| Am-243  | 2.51E-06                                   |
| Cs-137  | 5.90E-05                                   |
| Np-237  | 1.44E-05                                   |
| Pu-238  | 5.92E-02                                   |
| Pu-239  | 7.34E-02                                   |
| Pu-240  | 1.84E-02                                   |
| Pu-241  | 2.15E-01                                   |
| Pu-242  | 5.13E-07                                   |
| Th-229  | 3.67E-07                                   |
| Th-230  | 9.60E-11                                   |
| Th-232  | 2.15E-19                                   |
| U-233   | 9.77E-04                                   |
| U-234   | 3.01E-06                                   |
| U-235   | 2.96E-10                                   |
| U-236   | 2.18E-09                                   |
| U-238   | 3.55E-16                                   |

## Haz. Waste No(s).

D008, D011

## TRUCON Code(s)

116/216, 125/225

## Waste Stream Description

Combustible and noncombustible debris

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.



Waste Stream ID: LA-TA-50-01

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Combustible  | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Current Form Total</b>         | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.8        | 0.0        | 0.8        |
| <b>Final Form Total</b>     | <b>0.8</b> | <b>0.0</b> | <b>0.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 20.07                                |
| Aluminum-based Metals/Alloys    | 0.08                                 |
| Other Metals                    | 2.41                                 |
| Other Inorganic Materials       | 13.02                                |
| Cellulosics                     | 1.66                                 |
| Rubber                          | 2.49                                 |
| Plastics                        | 7.69                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.32                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.94E-02                                   |
| Am-243  | 8.62E-06                                   |
| Cs-137  | 1.46E-03                                   |
| Np-237  | 3.31E-08                                   |
| Pu-238  | 2.66E-04                                   |
| Pu-239  | 1.05E-03                                   |
| Th-229  | 5.20E-17                                   |
| Th-230  | 8.02E-09                                   |
| U-233   | 3.49E-13                                   |
| U-234   | 2.23E-04                                   |
| U-235   | 4.11E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

116/216

## Waste Stream Description

Combustible

Waste Stream ID: LA-TA-50-02

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Combustible  | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Current Form Total</b>   | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b>     | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 71.53                                |
| Aluminum-based Metals/Alloys    | 0.29                                 |
| Other Metals                    | 8.57                                 |
| Other Inorganic Materials       | 46.39                                |
| Cellulosics                     | 5.92                                 |
| Rubber                          | 8.88                                 |
| Plastics                        | 27.39                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.14                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.07E-02                                   |
| Cs-137  | 4.73E-07                                   |
| Np-237  | 4.51E-07                                   |
| Pu-238  | 5.62E-01                                   |
| Pu-239  | 5.62E-02                                   |
| Pu-241  | 3.04E-01                                   |
| Th-229  | 2.04E-15                                   |
| Th-230  | 1.84E-10                                   |
| U-233   | 8.93E-12                                   |
| U-234   | 8.14E-06                                   |
| U-235   | 5.21E-07                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
116/216, 117/217

## Waste Stream Description

Combustible

Waste Stream ID: LA-TA-50-05

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Combined Combustible and NonCombustible            |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>     | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 49.49                                |
| Aluminum-based Metals/Alloys    | 0.20                                 |
| Other Metals                    | 5.93                                 |
| Other Inorganic Materials       | 32.10                                |
| Cellulosics                     | 4.10                                 |
| Rubber                          | 6.14                                 |
| Plastics                        | 18.95                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.79                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.15E-02                                   |
| Np-237  | 1.05E-07                                   |
| Pu-238  | 1.52E-01                                   |
| Pu-239  | 7.14E-01                                   |
| Pu-240  | 1.90E-02                                   |
| Pu-241  | 1.57E-01                                   |
| Th-229  | 1.12E-16                                   |
| Th-230  | 3.17E-11                                   |
| Th-232  | 2.23E-19                                   |
| U-233   | 8.93E-13                                   |
| U-234   | 1.76E-06                                   |
| U-235   | 1.71E-08                                   |
| U-236   | 2.26E-09                                   |

## Haz. Waste No(s).

D004, D006, D007,  
D008, D009, D010

## TRUCON Code(s)

125/225

## Waste Stream Description

Combined Combustible and NonCombustible

Waste Stream ID: **LA-TA-50-06**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Combined Combustible and NonCombustible            |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner       | 1.7        | 0.0        | 1.7        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Current Form Total</b>         | <b>3.6</b> | <b>0.0</b> | <b>3.6</b> |

| Final Form Volumes                |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner       | 1.7        | 0.0        | 1.7        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>           | <b>3.6</b> | <b>0.0</b> | <b>3.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 40.18                                |
| Aluminum-based Metals/Alloys    | 0.16                                 |
| Other Metals                    | 4.82                                 |
| Other Inorganic Materials       | 26.06                                |
| Cellulosics                     | 3.33                                 |
| Rubber                          | 4.99                                 |
| Plastics                        | 15.39                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.64                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 173.50                               |
| Packaging Material, Plastic     | 25.99                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.98E+00                                   |
| Np-237  | 1.43E-05                                   |
| Pu-238  | 8.78E-01                                   |
| Pu-239  | 1.03E+00                                   |
| Pu-240  | 6.13E-01                                   |
| Pu-241  | 1.52E+01                                   |
| Pu-242  | 8.50E-04                                   |
| Th-229  | 2.36E-13                                   |
| Th-230  | 3.12E-09                                   |
| Th-232  | 1.15E-16                                   |
| U-233   | 4.81E-10                                   |
| U-234   | 4.25E-05                                   |
| U-235   | 1.63E-08                                   |
| U-236   | 2.91E-07                                   |
| U-238   | 2.05E-12                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Combined Combustible and NonCombustible

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LA-TA-50-10

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3100      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Vacuum filter cake (non-mixed)                     | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |             |            |             |
|---|-------------|------------|-------------|
| Container Type                          | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner             | 20.2        | 0.0        | 20.2        |
| 55-gal POC - 12" w/ Liner               | 0.6         | 0.0        | 0.6         |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.3         | 0.0        | 0.3         |
| <b>Current Form Total</b>               | <b>21.1</b> | <b>0.0</b> | <b>21.1</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 20.4        | 0.0        | 20.4        |
| 55-gal POC - 12" w/ Liner   | 0.6         | 0.0        | 0.6         |
| <b>Final Form Total</b>     | <b>21.0</b> | <b>0.0</b> | <b>21.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 272.60                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 30.30                                |
| Other Inorganic Materials       | 6.80                                 |
| Cellulosics                     | 64.00                                |
| Rubber                          | 1.10                                 |
| Plastics                        | 5.30                                 |
| Cements                         | 645.90                               |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 142.58                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 4.08                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.68E-01                                   |
| Np-237  | 1.69E-06                                   |
| Pu-238  | 8.72E+00                                   |
| Pu-239  | 4.82E+00                                   |
| Pu-240  | 1.15E+00                                   |
| Pu-241  | 1.11E+01                                   |
| Pu-242  | 7.10E-05                                   |
| Th-229  | 8.46E-15                                   |
| Th-230  | 1.08E-08                                   |
| Th-232  | 6.81E-17                                   |
| U-233   | 3.10E-11                                   |
| U-234   | 2.47E-04                                   |
| U-235   | 1.80E-05                                   |
| U-236   | 3.06E-07                                   |
| U-238   | 6.45E-04                                   |

## Haz. Waste No(s).

D005, D006, D007, D008, D009, D010, D011

## TRUCON Code(s)

111/211, 124/224

## Waste Stream Description

Vacuum filter Cake This waste is a dewatered sludge generated by the vacuum filtration of solids from treated aqueous waste slurry. The filter medium (diatomaceous earth) with the entrapped filtrate is then placed in drums with dry concrete absorbent.

Waste Stream ID: LA-TA-50-11

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Combustible debris waste from area WM 66 (mixed)   |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |            |            |            |
|---|------------|------------|------------|
| Container Type                          | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner             | 0.6        | 0.0        | 0.6        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Current Form Total</b>               | <b>1.3</b> | <b>0.0</b> | <b>1.3</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.0        | 0.0        | 1.0        |
| <b>Final Form Total</b>     | <b>1.0</b> | <b>0.0</b> | <b>1.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 3.10                                 |
| Aluminum-based Metals/Alloys    | 0.80                                 |
| Other Metals                    | 0.50                                 |
| Other Inorganic Materials       | 3.60                                 |
| Cellulosics                     | 6.60                                 |
| Rubber                          | 3.00                                 |
| Plastics                        | 11.20                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.10                                 |
| Organic Matrix                  | 0.10                                 |
| Soils/gravel                    | 0.10                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.40E-01                                   |
| Np-237  | 1.39E-06                                   |
| Pu-238  | 6.16E-02                                   |
| Pu-239  | 2.42E+00                                   |
| Pu-240  | 5.49E-01                                   |
| Pu-241  | 2.38E+00                                   |
| Pu-242  | 3.18E-05                                   |
| Th-229  | 4.50E-14                                   |
| Th-230  | 6.10E-10                                   |
| Th-232  | 2.73E-16                                   |
| U-233   | 6.38E-11                                   |
| U-234   | 5.04E-06                                   |
| U-235   | 6.22E-08                                   |
| U-236   | 4.24E-07                                   |
| U-238   | 1.25E-13                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Combustible Debris waste generated from facility and equipment operations and maintenance. This waste includes paper, rags, plastic, rubber, wood-based HEPA filters, and plastic-based and cellulose-based waste generated at the facility. Plastic-based waste includes, but may not be limited to, tape, polyethylene and vinyl; gloves; plastic vials; polystyrene; Tygon tubing; polyvinyl chloride plastic; Teflon products; Plexiglas; and dry box gloves (unleaded neoprene base). Cellulose-based waste includes, but may not be limited to, rags, wood, paper, cardboard, laboratory coats and coveralls, booties and cotton gloves, and similar materials. The waste stream may also contain a smaller fraction of non-combustible solids (e.g., scrap metal, crucibles, metal lids, zippers, discarded tools) and a small fraction of homogenous solids, salts, leached solids, ash, hydroxide cakes, crucibles, impure oxides.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LA-TA-50-12

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Metal  | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |             |            |             |
|---|-------------|------------|-------------|
| Container Type                          | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner             | 1.5         | 0.0        | 1.5         |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.6         | 0.0        | 0.6         |
| Box - Crate                             | 8.1         | 0.0        | 8.1         |
| SWB w/ 4 - 55-gal Drums w/ Liners       | 1.9         | 0.0        | 1.9         |
| <b>Current Form Total</b>               | <b>12.1</b> | <b>0.0</b> | <b>12.1</b> |

| Final Form Volumes                |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner       | 1.9         | 0.0        | 1.9         |
| SWB Dir Ld w/ Liner               | 9.5         | 0.0        | 9.5         |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9         | 0.0        | 1.9         |
| <b>Final Form Total</b>           | <b>13.2</b> | <b>0.0</b> | <b>13.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 28.79                                |
| Aluminum-based Metals/Alloys    | 0.12                                 |
| Other Metals                    | 3.45                                 |
| Other Inorganic Materials       | 18.67                                |
| Cellulosics                     | 2.38                                 |
| Rubber                          | 3.57                                 |
| Plastics                        | 11.02                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.46                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 158.52                               |
| Packaging Material, Plastic     | 8.43                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.22E-03                                   |
| Np-237  | 2.06E-08                                   |
| Pu-238  | 1.48E-02                                   |
| Pu-239  | 7.06E-03                                   |
| Pu-241  | 9.52E-04                                   |
| Th-229  | 2.21E-15                                   |
| Th-230  | 9.94E-10                                   |
| U-233   | 1.87E-12                                   |
| U-234   | 7.57E-06                                   |
| U-235   | 2.02E-10                                   |
| U-238   | 7.57E-02                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

117/217

## Waste Stream Description

Metal

Waste Stream ID: LA-TA-50-13

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Glass  | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |            |            |            |
|---|------------|------------|------------|
| Container Type                          | Stored     | Proj.      | Total      |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.3        | 0.0        | 0.3        |
| <b>Current Form Total</b>               | <b>0.3</b> | <b>0.0</b> | <b>0.3</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>     | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 18.07                                |
| Aluminum-based Metals/Alloys    | 0.07                                 |
| Other Metals                    | 2.17                                 |
| Other Inorganic Materials       | 11.72                                |
| Cellulosics                     | 1.50                                 |
| Rubber                          | 2.24                                 |
| Plastics                        | 6.92                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.29                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-238  | 4.31E-02                                   |
| Th-230  | 2.20E-10                                   |
| U-234   | 2.51E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
118/218

## Waste Stream Description

Glass



Waste Stream ID: LA-TA-50-14

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Hepa filters                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Current Form Total</b>   | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b>     | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 311.72                               |
| Aluminum-based Metals/Alloys    | 1.26                                 |
| Other Metals                    | 37.36                                |
| Other Inorganic Materials       | 202.15                               |
| Cellulosics                     | 25.80                                |
| Rubber                          | 38.70                                |
| Plastics                        | 119.35                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 4.97                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.31E-01                                   |
| Np-237  | 1.12E-06                                   |
| Pu-238  | 7.39E-03                                   |
| Pu-239  | 3.74E-02                                   |
| Th-229  | 5.20E-14                                   |
| Th-230  | 7.32E-11                                   |
| U-233   | 6.38E-11                                   |
| U-234   | 6.05E-07                                   |
| U-235   | 9.59E-10                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Hepa filters

Waste Stream ID: LA-TA-50-15

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory  | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste                          | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Non-combustible and combustible debris waste from operations at WCRRF & SRF |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |              |            |              |
|---|--------------|------------|--------------|
| Container Type                          | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner             | 0.4          | 0.0        | 0.4          |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 2.9          | 0.0        | 2.9          |
| Other                                   | 125.3        | 0.0        | 125.3        |
| SWB w/ 4 - 55-gal Drums w/ Liners       | 13.2         | 0.0        | 13.2         |
| <b>Current Form Total</b>               | <b>141.8</b> | <b>0.0</b> | <b>141.8</b> |

| Final Form Volumes                |              |            |              |
|-----------------------------------|--------------|------------|--------------|
| Container Type                    | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner       | 2.3          | 0.0        | 2.3          |
| SWB Dir Ld w/ Liner               | 126.6        | 0.0        | 126.6        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 13.2         | 0.0        | 13.2         |
| <b>Final Form Total</b>           | <b>142.1</b> | <b>0.0</b> | <b>142.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 260.30                               |
| Aluminum-based Metals/Alloys    | 0.14                                 |
| Other Metals                    | 104.83                               |
| Other Inorganic Materials       | 7.15                                 |
| Cellulosics                     | 44.84                                |
| Rubber                          | 0.77                                 |
| Plastics                        | 3.69                                 |
| Cements                         | 4.92                                 |
| Inorganic Matrix                | 4.27                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 158.50                               |
| Packaging Material, Plastic     | 3.18                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.97E-02                                   |
| Cs-137  | 6.74E-03                                   |
| Np-237  | 7.24E-07                                   |
| Pu-238  | 1.77E+00                                   |
| Pu-239  | 2.62E-01                                   |
| Pu-240  | 5.81E-02                                   |
| Pu-241  | 2.86E-01                                   |
| Pu-242  | 3.77E-06                                   |
| Sr-90   | 5.52E-03                                   |
| Th-229  | 2.70E-14                                   |
| Th-230  | 1.56E-08                                   |
| Th-232  | 4.25E-17                                   |
| U-233   | 3.66E-11                                   |
| U-234   | 1.36E-04                                   |
| U-235   | 1.15E-05                                   |
| U-236   | 5.65E-08                                   |
| U-238   | 1.04E-09                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

125/225

## Waste Stream Description

Non-combustible and combustible debris waste from operations in the WCRRF and SRF (building 50-69) (mixed). Combined Non-combustible and combustible waste generated from facility and equipment operations and maintenance. This waste includes, but may not be limited to, small tools, small equipment, cans, motors, pumps, process equipment, gloveboxes, ventilation ductwork, HEPA filters, pipes, glass, graphite, slag and crucibles, salt, discarded lab ware, windows, and bottles. The waste stream may also contain a smaller fraction of combustible solids (e.g., paper, rags, plastic, rubber, leaded gloves) and a small fraction of homogeneous solids (e.g., leached solids, ash, hydroxide cakes, impure oxides).

Waste Stream ID: **LA-TA-50-16**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Combined Combustible and NonCombustible            |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| SWB w/ 4 - 55-gal Drums w/ Liners | 13.2        | 0.0        | 13.2        |
| <b>Current Form Total</b>         | <b>13.2</b> | <b>0.0</b> | <b>13.2</b> |

| Final Form Volumes                |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| SWB w/ 4 - 55-gal Drums w/ Liners | 13.2        | 0.0        | 13.2        |
| <b>Final Form Total</b>           | <b>13.2</b> | <b>0.0</b> | <b>13.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 89.69                                |
| Aluminum-based Metals/Alloys    | 0.36                                 |
| Other Metals                    | 10.75                                |
| Other Inorganic Materials       | 58.17                                |
| Cellulosics                     | 7.42                                 |
| Rubber                          | 11.13                                |
| Plastics                        | 34.34                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.43                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 211.10                               |
| Packaging Material, Plastic     | 16.30                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.04E-02                                   |
| Am-243  | 6.19E-04                                   |
| Cs-137  | 4.68E-04                                   |
| Np-237  | 2.70E-04                                   |
| Pu-238  | 2.55E-01                                   |
| Pu-239  | 4.79E-02                                   |
| Pu-240  | 6.99E-03                                   |
| Pu-241  | 2.26E-01                                   |
| Pu-242  | 6.57E-07                                   |
| Th-229  | 1.07E-11                                   |
| Th-230  | 6.87E-10                                   |
| Th-232  | 1.00E-18                                   |
| U-233   | 1.64E-08                                   |
| U-234   | 1.07E-05                                   |
| U-235   | 6.61E-10                                   |
| U-236   | 2.90E-09                                   |
| U-238   | 1.39E-15                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Combined Combustible and NonCombustible

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LA-TA-50-17

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                       |                                       |            |          |    |
|-------------|--|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory               | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3150      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents      | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Cemented wastewater treatment sludge (mixed) |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                     |              |            |              |
|--|--------------|------------|--------------|
| Container Type                           | Stored       | Proj.      | Total        |
| 110-gal Drum w/ 1 - 55-gal Drum w/ Liner | 1.2          | 0.0        | 1.2          |
| 55-gal Drum Dir Ld w/ Liner              | 30.2         | 0.0        | 30.2         |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner  | 28.7         | 0.0        | 28.7         |
| SWB w/ 4 - 55-gal Drums w/ Liners        | 279.7        | 0.0        | 279.7        |
| <b>Current Form Total</b>                | <b>339.8</b> | <b>0.0</b> | <b>339.8</b> |

| Final Form Volumes                |              |            |              |
|-----------------------------------|--------------|------------|--------------|
| Container Type                    | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner       | 49.3         | 0.0        | 49.3         |
| SWB w/ 4 - 55-gal Drums w/ Liners | 279.7        | 0.0        | 279.7        |
| <b>Final Form Total</b>           | <b>329.0</b> | <b>0.0</b> | <b>329.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.18                                 |
| Aluminum-based Metals/Alloys    | 0.18                                 |
| Other Metals                    | 0.18                                 |
| Other Inorganic Materials       | 0.18                                 |
| Cellulosics                     | 0.18                                 |
| Rubber                          | 0.18                                 |
| Plastics                        | 0.20                                 |
| Cements                         | 693.00                               |
| Inorganic Matrix                | 723.21                               |
| Organic Matrix                  | 85.91                                |
| Soils/gravel                    | 11.61                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 199.07                               |
| Packaging Material, Plastic     | 19.40                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.33E+00                                   |
| Am-243  | 1.25E-11                                   |
| Cs-137  | 3.72E-04                                   |
| Np-237  | 9.75E-06                                   |
| Pu-238  | 1.35E-01                                   |
| Pu-239  | 1.32E+00                                   |
| Pu-241  | 2.40E-03                                   |
| Pu-242  | 5.92E-09                                   |
| Sr-90   | 1.26E-05                                   |
| Th-229  | 7.71E-08                                   |
| Th-230  | 3.64E-08                                   |
| U-233   | 3.74E-05                                   |
| U-234   | 1.88E-04                                   |
| U-235   | 2.42E-05                                   |
| U-238   | 5.47E-08                                   |

## Haz. Waste No(s).

D004, D006, D007, D008, D009, D010, D011, F001, F002, F005

## TRUCON Code(s)

111/211, 114/214

## Waste Stream Description

Cemented wastewater treatment sludge from room 60 pretreatment of TA-55 liquid waste. Solidified aqueous waste and cemented sludge. The sludge is a residue from treatment and filtration operations involving aqueous liquid radioactive waste from TA-55, Building PF4. This treatment produces a thin sludge (approximately 25 percent solids) that is alkaline and is compatible with Portland cement. Final cemented waste monoliths are produced by mixing the waste in 55-gallon steel drums containing empirically determined quantities of sludge, Portland cement, vermiculite, and sodium silicate.

Waste Stream ID: LA-TA-50-18

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                       |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory          | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3150      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Cemented caustic liquid waste (mixed)   | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                     |              |            |              |
|--|--------------|------------|--------------|
| Container Type                           | Stored       | Proj.      | Total        |
| 110-gal Drum w/ 1 - 55-gal Drum w/ Liner | 3.3          | 0.0        | 3.3          |
| 55-gal Drum Dir Ld w/ Liner              | 42.4         | 0.0        | 42.4         |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner  | 86.9         | 0.0        | 86.9         |
| <b>Current Form Total</b>                | <b>132.7</b> | <b>0.0</b> | <b>132.7</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 100.3        | 0.0        | 100.3        |
| <b>Final Form Total</b>     | <b>100.3</b> | <b>0.0</b> | <b>100.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.18                                 |
| Aluminum-based Metals/Alloys    | 0.18                                 |
| Other Metals                    | 0.18                                 |
| Other Inorganic Materials       | 0.18                                 |
| Cellulosics                     | 0.18                                 |
| Rubber                          | 0.18                                 |
| Plastics                        | 0.22                                 |
| Cements                         | 693.00                               |
| Inorganic Matrix                | 137.94                               |
| Organic Matrix                  | 655.13                               |
| Soils/gravel                    | 87.76                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.08E+00                                   |
| Np-237  | 1.22E-05                                   |
| Pu-238  | 2.04E-01                                   |
| Pu-239  | 2.98E+00                                   |
| Pu-240  | 9.29E-04                                   |
| Pu-241  | 9.75E-04                                   |
| Th-229  | 6.35E-07                                   |
| Th-230  | 3.61E-09                                   |
| Th-232  | 7.89E-19                                   |
| U-233   | 1.99E-04                                   |
| U-234   | 2.26E-05                                   |
| U-235   | 2.26E-07                                   |
| U-236   | 9.38E-10                                   |

## Haz. Waste No(s).

D007, D009, F001, F002

## TRUCON Code(s)

111/211

## Waste Stream Description

Cemented Caustic Liquid Waste Solidified (through cementation) caustic aqueous waste from TA-55. The sludge is a residue from numerous treatment and filtration operations involving aqueous liquid radioactive waste.

Waste Stream ID: LA-TA-50-19

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                       |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory          | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3120      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Vacuum filter cake (mixed)              | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                     |               |            |               |
|--|---------------|------------|---------------|
| Container Type                           | Stored        | Proj.      | Total         |
| 110-gal Drum w/ 1 - 55-gal Drum w/ Liner | 1.7           | 0.0        | 1.7           |
| 55-gal Drum Dir Ld w/ Liner              | 593.2         | 0.0        | 593.2         |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner  | 469.5         | 0.0        | 469.5         |
| <b>Current Form Total</b>                | <b>1064.4</b> | <b>0.0</b> | <b>1064.4</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 897.3        | 0.0        | 897.3        |
| <b>Final Form Total</b>     | <b>897.3</b> | <b>0.0</b> | <b>897.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.23                                 |
| Aluminum-based Metals/Alloys    | 0.19                                 |
| Other Metals                    | 0.18                                 |
| Other Inorganic Materials       | 0.21                                 |
| Cellulosics                     | 0.48                                 |
| Rubber                          | 0.34                                 |
| Plastics                        | 1.05                                 |
| Cements                         | 645.90                               |
| Inorganic Matrix                | 173.85                               |
| Organic Matrix                  | 339.60                               |
| Soils/gravel                    | 48.86                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.98E-01                                   |
| Am-243  | 7.46E-08                                   |
| Cs-137  | 1.69E-06                                   |
| Np-237  | 3.61E-06                                   |
| Pu-238  | 9.04E-02                                   |
| Pu-239  | 3.01E-01                                   |
| Pu-240  | 1.49E-03                                   |
| Pu-241  | 8.71E-03                                   |
| Pu-242  | 1.51E-07                                   |
| Sr-90   | 1.68E-06                                   |
| Th-229  | 3.27E-13                                   |
| Th-230  | 1.98E-09                                   |
| Th-232  | 1.34E-18                                   |
| U-233   | 2.88E-10                                   |
| U-234   | 1.12E-05                                   |
| U-235   | 1.55E-07                                   |
| U-236   | 1.54E-09                                   |
| U-238   | 1.34E-08                                   |

## Haz. Waste No(s).

D007, D008, F001

## TRUCON Code(s)

111/211

## Waste Stream Description

Vacuum filter Cake This waste is a dewatered sludge generated by the vacuum filtration of solids from treated aqueous waste slurry. The filter medium (diatomaceous earth) with the entrapped filtrate is then placed in drums with dry concrete absorbent

Waste Stream ID: LA-TA-50-20

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory          | Final Waste Form      | Soils           | Waste Matrix Code                     | S4100      | Handling | CH |
| Source Cat. | Remediation/D&D Waste                   | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Plutonium contaminated soil (non-mixed) |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |            |            |            |
|---|------------|------------|------------|
| Container Type                          | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner             | 0.4        | 0.0        | 0.4        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.3        | 0.0        | 0.3        |
| <b>Current Form Total</b>               | <b>0.7</b> | <b>0.0</b> | <b>0.7</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b>     | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 1200.00                              |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.25E-03                                   |
| Np-237  | 8.58E-08                                   |
| Pu-239  | 9.67E-03                                   |
| Th-229  | 4.62E-15                                   |
| U-233   | 5.26E-12                                   |
| U-235   | 2.67E-10                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

111/211

## Waste Stream Description

Plutonium Contaminated Soils contaminated with transuranic material as a result of facility and equipment operations and maintenance.

Waste Stream ID: LA-TA-50-40

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory   | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Remediation/D&D Waste  | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Metal debris waste from TA-50 decontamination and decommissioning activities (mixed) |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| Box - Crate               | 0.6        | 0.0        | 0.6        |
| <b>Current Form Total</b> | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| SWB Dir Ld w/ Liner     | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b> | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 263.87                               |
| Aluminum-based Metals/Alloys    | 0.23                                 |
| Other Metals                    | 23.62                                |
| Other Inorganic Materials       | 6.80                                 |
| Cellulosics                     | 63.98                                |
| Rubber                          | 1.10                                 |
| Plastics                        | 5.26                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 1.20                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-239  | 3.20E-04                                   |
| U-235   | 8.21E-12                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

125/225

## Waste Stream Description

The waste mostly consists of metals or metal equipment, such as motors, pumps, tools, and process equipment, either whole or sectioned, and lesser amounts of combustible components. The waste also includes mixed metal scrap and incidental combustible waste generated from size reduction of equipment from various TAs throughout LANL. In addition, it contains small volumes of combustibles generated during decommissioning, sectioning, and packaging.



Waste Stream ID: LA-TA-50-41

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory   | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Remediation/D&D Waste  | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Metal debris waste from TA-50 decontamination and decommissioning activities (non-mixed) |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Box - FRP                 | 34.3        | 0.0        | 34.3        |
| <b>Current Form Total</b> | <b>34.3</b> | <b>0.0</b> | <b>34.3</b> |

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner     | 35.9        | 0.0        | 35.9        |
| <b>Final Form Total</b> | <b>35.9</b> | <b>0.0</b> | <b>35.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 272.60                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 30.30                                |
| Other Inorganic Materials       | 6.80                                 |
| Cellulosics                     | 64.00                                |
| Rubber                          | 1.10                                 |
| Plastics                        | 5.30                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 1.20                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.67E-03                                   |
| Np-237  | 7.30E-09                                   |
| Pu-238  | 1.16E-03                                   |
| Pu-239  | 4.44E-02                                   |
| Pu-240  | 1.04E-02                                   |
| Pu-241  | 7.65E-02                                   |
| Pu-242  | 6.00E-07                                   |
| Th-229  | 6.11E-17                                   |
| Th-230  | 3.61E-12                                   |
| Th-232  | 1.71E-18                                   |
| U-233   | 1.68E-13                                   |
| U-234   | 5.25E-08                                   |
| U-235   | 6.57E-10                                   |
| U-236   | 4.62E-09                                   |
| U-238   | 1.36E-15                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

This waste mostly consists of metals or metal equipment, such as motors, pumps, tools, and process equipment, either whole or sectioned, and lesser amounts of combustible components. The waste also includes metal scrap and incidental combustible waste generated from size reduction of equipment from various TAs throughout LANL. In addition, it contains small volumes of combustibles generated during decommissioning, sectioning, and packaging.

Waste Stream ID: **LA-TA-54-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | DVRS HEPA filter 50% or more by volume HEPA        |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| SWB w/ 4 - 55-gal Drums w/ Liners | 18.9        | 0.0        | 18.9        |
| <b>Current Form Total</b>         | <b>18.9</b> | <b>0.0</b> | <b>18.9</b> |

| Final Form Volumes                |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| SWB w/ 4 - 55-gal Drums w/ Liners | 18.9        | 0.0        | 18.9        |
| <b>Final Form Total</b>           | <b>18.9</b> | <b>0.0</b> | <b>18.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 43.90                                |
| Aluminum-based Metals/Alloys    | 0.18                                 |
| Other Metals                    | 5.26                                 |
| Other Inorganic Materials       | 28.40                                |
| Cellulosics                     | 3.63                                 |
| Rubber                          | 5.44                                 |
| Plastics                        | 16.80                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.70                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 211.10                               |
| Packaging Material, Plastic     | 16.30                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.48E-03                                   |
| Am-243  | 6.11E-07                                   |
| Cs-137  | 6.46E-05                                   |
| Np-237  | 9.71E-08                                   |
| Pu-238  | 3.57E-02                                   |
| Pu-239  | 5.00E-03                                   |
| Pu-240  | 1.05E-03                                   |
| Pu-241  | 1.34E-02                                   |
| Pu-242  | 6.02E-08                                   |
| Th-229  | 1.76E-16                                   |
| Th-230  | 4.16E-12                                   |
| Th-232  | 6.89E-21                                   |
| U-233   | 1.25E-12                                   |
| U-234   | 3.07E-07                                   |
| U-235   | 2.49E-08                                   |
| U-236   | 9.30E-11                                   |
| U-238   | 2.72E-17                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

119/219

## Waste Stream Description

DVRS HEPA filter 50% or more by volume HEPA

Waste Stream ID: LA-TA-55-01

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Graphite   | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.0        | 0.0        | 1.0        |
| <b>Current Form Total</b>   | <b>1.0</b> | <b>0.0</b> | <b>1.0</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.0        | 0.0        | 1.0        |
| <b>Final Form Total</b>     | <b>1.0</b> | <b>0.0</b> | <b>1.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 51.53                                |
| Aluminum-based Metals/Alloys    | 0.21                                 |
| Other Metals                    | 6.18                                 |
| Other Inorganic Materials       | 33.42                                |
| Cellulosics                     | 4.26                                 |
| Rubber                          | 6.40                                 |
| Plastics                        | 19.73                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.82                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.59E-01                                   |
| Np-237  | 1.41E-06                                   |
| Pu-238  | 4.72E+00                                   |
| Pu-239  | 4.22E+00                                   |
| Pu-240  | 1.00E+00                                   |
| Pu-241  | 9.48E+00                                   |
| Pu-242  | 5.78E-05                                   |
| Th-229  | 7.03E-15                                   |
| Th-230  | 5.12E-09                                   |
| Th-232  | 5.95E-17                                   |
| U-233   | 2.58E-11                                   |
| U-234   | 1.25E-04                                   |
| U-235   | 3.75E-08                                   |
| U-236   | 2.68E-07                                   |
| U-238   | 7.85E-14                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

115/215, 125/225

## Waste Stream Description

Graphite

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LA-TA-55-02

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Combustible  | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.9        | 0.0        | 1.9        |
| <b>Current Form Total</b>   | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |
| Final Form Volumes          |            |            |            |
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>     | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 35.19                                |
| Aluminum-based Metals/Alloys    | 0.14                                 |
| Other Metals                    | 4.22                                 |
| Other Inorganic Materials       | 22.82                                |
| Cellulosics                     | 2.91                                 |
| Rubber                          | 4.37                                 |
| Plastics                        | 13.48                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.56                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.59E-01                                   |
| Am-243  | 3.67E-06                                   |
| Np-237  | 8.98E-06                                   |
| Pu-238  | 9.54E-02                                   |
| Pu-239  | 3.34E+00                                   |
| Pu-240  | 7.91E-01                                   |
| Pu-241  | 7.05E+00                                   |
| Pu-242  | 4.52E-05                                   |
| Th-229  | 1.64E-13                                   |
| Th-230  | 3.92E-08                                   |
| Th-232  | 5.80E-17                                   |
| U-233   | 3.58E-10                                   |
| U-234   | 4.37E-04                                   |
| U-235   | 1.79E-05                                   |
| U-236   | 2.35E-07                                   |
| U-238   | 1.81E-05                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D022, D040,  
F001

## TRUCON Code(s)

116/216

## Waste Stream Description

Combustible

Waste Stream ID: **LA-TA-55-03**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Combustible  | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner       | 61.4        | 0.0        | 61.4        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 3.8         | 0.0        | 3.8         |
| <b>Current Form Total</b>         | <b>65.1</b> | <b>0.0</b> | <b>65.1</b> |

| Final Form Volumes                |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner       | 61.4        | 0.0        | 61.4        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 3.8         | 0.0        | 3.8         |
| <b>Final Form Total</b>           | <b>65.1</b> | <b>0.0</b> | <b>65.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 41.25                                |
| Aluminum-based Metals/Alloys    | 0.17                                 |
| Other Metals                    | 4.94                                 |
| Other Inorganic Materials       | 26.75                                |
| Cellulosics                     | 3.41                                 |
| Rubber                          | 5.12                                 |
| Plastics                        | 15.79                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.66                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 135.46                               |
| Packaging Material, Plastic     | 35.80                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.61E-01                                   |
| Am-243  | 9.54E-06                                   |
| Cs-137  | 2.26E-08                                   |
| Np-237  | 1.57E-05                                   |
| Pu-238  | 1.58E+01                                   |
| Pu-239  | 4.33E+00                                   |
| Pu-240  | 1.08E+00                                   |
| Pu-241  | 1.18E+01                                   |
| Pu-242  | 5.21E-03                                   |
| Pu-244  | 3.09E-09                                   |
| Sr-90   | 2.29E-08                                   |
| Th-229  | 2.87E-13                                   |
| Th-230  | 8.69E-08                                   |
| Th-232  | 7.93E-17                                   |
| U-233   | 6.28E-10                                   |
| U-234   | 1.20E-03                                   |
| U-235   | 2.30E-06                                   |
| U-236   | 3.21E-07                                   |
| U-238   | 2.81E-08                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, F002

## TRUCON Code(s)

116/216

## Waste Stream Description

Combustible

Waste Stream ID: **LA-TA-55-04**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Metal  | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner       | 13.5        | 0.0        | 13.5        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 9.5         | 0.0        | 9.5         |
| <b>Current Form Total</b>         | <b>23.0</b> | <b>0.0</b> | <b>23.0</b> |

| Final Form Volumes                |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner       | 13.5        | 0.0        | 13.5        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 9.5         | 0.0        | 9.5         |
| <b>Final Form Total</b>           | <b>23.0</b> | <b>0.0</b> | <b>23.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 116.09                               |
| Aluminum-based Metals/Alloys    | 0.47                                 |
| Other Metals                    | 13.91                                |
| Other Inorganic Materials       | 75.29                                |
| Cellulosics                     | 9.61                                 |
| Rubber                          | 14.41                                |
| Plastics                        | 44.45                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.85                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 163.84                               |
| Packaging Material, Plastic     | 28.48                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.59E-01                                   |
| Am-243  | 3.48E-05                                   |
| Cm-244  | 5.50E-04                                   |
| Np-237  | 1.02E-06                                   |
| Pu-238  | 6.82E-01                                   |
| Pu-239  | 1.15E+00                                   |
| Pu-240  | 2.77E-01                                   |
| Pu-241  | 2.69E+00                                   |
| Pu-242  | 2.14E-04                                   |
| Th-229  | 1.21E-14                                   |
| Th-230  | 7.39E-10                                   |
| Th-232  | 1.64E-17                                   |
| U-233   | 3.13E-11                                   |
| U-234   | 1.80E-05                                   |
| U-235   | 3.82E-07                                   |
| U-236   | 7.38E-08                                   |
| U-238   | 1.09E-07                                   |

## Haz. Waste No(s).

D004, D005, D006,  
D007, D008, D009,  
D010, D011, D022,  
D035, D040, F001,  
F002, F005

## TRUCON Code(s)

117/217

## Waste Stream Description

Metal

Waste Stream ID: LA-TA-55-05

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Metal  | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |              |            |              |
|---|--------------|------------|--------------|
| Container Type                          | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner             | 40.1         | 0.0        | 40.1         |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.3          | 0.0        | 0.3          |
| Other                                   | 57.5         | 0.0        | 57.5         |
| SWB w/ 4 - 55-gal Drums w/ Liners       | 41.6         | 0.0        | 41.6         |
| <b>Current Form Total</b>               | <b>139.6</b> | <b>0.0</b> | <b>139.6</b> |

| Final Form Volumes                |              |            |              |
|-----------------------------------|--------------|------------|--------------|
| Container Type                    | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner       | 40.4         | 0.0        | 40.4         |
| SWB Dir Ld w/ Liner               | 58.6         | 0.0        | 58.6         |
| SWB w/ 4 - 55-gal Drums w/ Liners | 41.6         | 0.0        | 41.6         |
| <b>Final Form Total</b>           | <b>140.5</b> | <b>0.0</b> | <b>140.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 108.87                               |
| Aluminum-based Metals/Alloys    | 0.44                                 |
| Other Metals                    | 13.05                                |
| Other Inorganic Materials       | 70.60                                |
| Cellulosics                     | 9.01                                 |
| Rubber                          | 13.51                                |
| Plastics                        | 41.68                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.73                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 164.03                               |
| Packaging Material, Plastic     | 15.95                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.92E-01                                   |
| Am-243  | 1.94E-06                                   |
| Cm-244  | 4.88E-04                                   |
| Cs-137  | 8.75E-09                                   |
| Np-237  | 1.39E-06                                   |
| Pu-238  | 1.77E+01                                   |
| Pu-239  | 1.06E+00                                   |
| Pu-240  | 2.64E-01                                   |
| Pu-241  | 2.84E+00                                   |
| Pu-242  | 8.54E-04                                   |
| Pu-244  | 6.45E-10                                   |
| Sr-90   | 8.90E-09                                   |
| Th-229  | 2.41E-14                                   |
| Th-230  | 4.65E-08                                   |
| Th-232  | 2.34E-17                                   |
| U-233   | 5.13E-11                                   |
| U-234   | 7.55E-04                                   |
| U-235   | 4.05E-06                                   |
| U-236   | 8.62E-08                                   |
| U-238   | 1.81E-07                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

117/217, 125/225

## Waste Stream Description

Metal

Waste Stream ID: LA-TA-55-06

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Glass  | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.0        | 0.0        | 1.0        |
| <b>Current Form Total</b>   | <b>1.0</b> | <b>0.0</b> | <b>1.0</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.0        | 0.0        | 1.0        |
| <b>Final Form Total</b>     | <b>1.0</b> | <b>0.0</b> | <b>1.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 48.43                                |
| Aluminum-based Metals/Alloys    | 0.20                                 |
| Other Metals                    | 5.80                                 |
| Other Inorganic Materials       | 31.41                                |
| Cellulosics                     | 4.01                                 |
| Rubber                          | 6.01                                 |
| Plastics                        | 18.54                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.77                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.25E-01                                   |
| Np-237  | 5.67E-07                                   |
| Pu-238  | 4.66E-02                                   |
| Pu-239  | 1.69E+00                                   |
| Pu-240  | 4.02E-01                                   |
| Pu-241  | 3.81E+00                                   |
| Pu-242  | 2.34E-05                                   |
| Th-229  | 2.83E-15                                   |
| Th-230  | 5.05E-11                                   |
| Th-232  | 2.38E-17                                   |
| U-233   | 1.04E-11                                   |
| U-234   | 1.23E-06                                   |
| U-235   | 2.00E-07                                   |
| U-236   | 1.07E-07                                   |
| U-238   | 2.49E-09                                   |

## Haz. Waste No(s).

D005, D006, D007,  
D008, D009, D011,  
D022, D040

## TRUCON Code(s)

118/218

## Waste Stream Description

Glass



Waste Stream ID: LA-TA-55-07

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Glass  | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |             |            |             |
|---|-------------|------------|-------------|
| Container Type                          | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner             | 10.2        | 0.0        | 10.2        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.3         | 0.0        | 0.3         |
| <b>Current Form Total</b>               | <b>10.5</b> | <b>0.0</b> | <b>10.5</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 10.4        | 0.0        | 10.4        |
| <b>Final Form Total</b>     | <b>10.4</b> | <b>0.0</b> | <b>10.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 60.94                                |
| Aluminum-based Metals/Alloys    | 0.25                                 |
| Other Metals                    | 7.30                                 |
| Other Inorganic Materials       | 39.52                                |
| Cellulosics                     | 5.04                                 |
| Rubber                          | 7.56                                 |
| Plastics                        | 23.33                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.97                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.45E-01                                   |
| Am-243  | 2.55E-06                                   |
| Cs-137  | 1.53E-08                                   |
| Np-237  | 6.13E-06                                   |
| Pu-238  | 1.00E+01                                   |
| Pu-239  | 4.25E+00                                   |
| Pu-240  | 1.07E+00                                   |
| Pu-241  | 1.32E+01                                   |
| Pu-242  | 1.76E-02                                   |
| Pu-244  | 1.80E-08                                   |
| Sr-90   | 1.56E-08                                   |
| Th-229  | 8.65E-14                                   |
| Th-230  | 1.42E-08                                   |
| Th-232  | 7.86E-17                                   |
| U-233   | 2.04E-10                                   |
| U-234   | 3.04E-04                                   |
| U-235   | 1.21E-05                                   |
| U-236   | 3.18E-07                                   |
| U-238   | 8.85E-08                                   |

## Haz. Waste No(s).

D009

## TRUCON Code(s)

118/218

## Waste Stream Description

Glass

Waste Stream ID: LA-TA-55-08

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Hepa Filters                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner       | 5.0         | 0.0        | 5.0         |
| SWB w/ 4 - 55-gal Drums w/ Liners | 20.8        | 0.0        | 20.8        |
| <b>Current Form Total</b>         | <b>25.8</b> | <b>0.0</b> | <b>25.8</b> |

| Final Form Volumes                |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner       | 5.0         | 0.0        | 5.0         |
| SWB w/ 4 - 55-gal Drums w/ Liners | 20.8        | 0.0        | 20.8        |
| <b>Final Form Total</b>           | <b>25.8</b> | <b>0.0</b> | <b>25.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 40.65                                |
| Aluminum-based Metals/Alloys    | 0.16                                 |
| Other Metals                    | 4.87                                 |
| Other Inorganic Materials       | 26.36                                |
| Cellulosics                     | 3.36                                 |
| Rubber                          | 5.05                                 |
| Plastics                        | 15.57                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.65                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 195.55                               |
| Packaging Material, Plastic     | 20.31                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.36E-02                                   |
| Np-237  | 3.63E-07                                   |
| Pu-238  | 3.30E+00                                   |
| Pu-239  | 5.22E-01                                   |
| Pu-240  | 1.24E-01                                   |
| Pu-241  | 1.12E+00                                   |
| Pu-242  | 8.34E-06                                   |
| Th-229  | 4.44E-15                                   |
| Th-230  | 4.10E-08                                   |
| Th-232  | 9.12E-18                                   |
| U-233   | 1.10E-11                                   |
| U-234   | 5.04E-04                                   |
| U-235   | 5.14E-09                                   |
| U-236   | 3.69E-08                                   |
| U-238   | 1.26E-14                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

119/219

## Waste Stream Description

Hepa Filters

Waste Stream ID: LA-TA-55-09

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Leaded Gloves                                      | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 6.2        | 0.0        | 6.2        |
| <b>Current Form Total</b>   | <b>6.2</b> | <b>0.0</b> | <b>6.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 6.2        | 0.0        | 6.2        |
| <b>Final Form Total</b>     | <b>6.2</b> | <b>0.0</b> | <b>6.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 156.53                               |
| Aluminum-based Metals/Alloys    | 0.63                                 |
| Other Metals                    | 18.76                                |
| Other Inorganic Materials       | 101.51                               |
| Cellulosics                     | 12.95                                |
| Rubber                          | 19.43                                |
| Plastics                        | 59.93                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 2.49                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.99E-01                                   |
| Am-243  | 1.02E-06                                   |
| Np-237  | 1.63E-06                                   |
| Pu-238  | 6.52E+01                                   |
| Pu-239  | 2.83E+00                                   |
| Pu-240  | 6.97E-01                                   |
| Pu-241  | 7.62E+00                                   |
| Pu-242  | 2.99E-03                                   |
| Pu-244  | 1.42E-10                                   |
| Th-229  | 1.33E-14                                   |
| Th-230  | 4.33E-07                                   |
| Th-232  | 5.11E-17                                   |
| U-233   | 3.83E-11                                   |
| U-234   | 5.76E-03                                   |
| U-235   | 1.87E-06                                   |
| U-236   | 2.07E-07                                   |
| U-238   | 1.13E-05                                   |

## Haz. Waste No(s).

D005, D006, D007,  
D008, D009, D011,  
D019, D021, D022,  
D039, D040, F001,  
F002, F003

## TRUCON Code(s)

123/223

## Waste Stream Description

Leaded Gloves

Waste Stream ID: LA-TA-55-10

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Leaded Gloves                                      | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 3.7        | 0.0        | 3.7        |
| <b>Current Form Total</b>   | <b>3.7</b> | <b>0.0</b> | <b>3.7</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 3.7        | 0.0        | 3.7        |
| <b>Final Form Total</b>     | <b>3.7</b> | <b>0.0</b> | <b>3.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 167.52                               |
| Aluminum-based Metals/Alloys    | 0.68                                 |
| Other Metals                    | 20.08                                |
| Other Inorganic Materials       | 108.64                               |
| Cellulosics                     | 13.86                                |
| Rubber                          | 20.80                                |
| Plastics                        | 64.14                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 2.67                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.33E-01                                   |
| Am-243  | 7.59E-07                                   |
| Cs-137  | 2.17E-08                                   |
| Np-237  | 3.79E-06                                   |
| Pu-238  | 1.99E+01                                   |
| Pu-239  | 2.99E+00                                   |
| Pu-240  | 7.32E-01                                   |
| Pu-241  | 8.53E+00                                   |
| Pu-242  | 3.63E-03                                   |
| Sr-90   | 2.21E-08                                   |
| Th-229  | 4.66E-14                                   |
| Th-230  | 2.71E-08                                   |
| Th-232  | 4.34E-17                                   |
| U-233   | 1.19E-10                                   |
| U-234   | 5.95E-04                                   |
| U-235   | 1.74E-06                                   |
| U-236   | 1.95E-07                                   |
| U-238   | 4.93E-12                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

116/216, 123/223

## Waste Stream Description

Leaded Gloves

Waste Stream ID: LA-TA-55-11

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Combustible and NonCombustible                     | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.9        | 0.0        | 2.9        |
| <b>Current Form Total</b>   | <b>2.9</b> | <b>0.0</b> | <b>2.9</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.9        | 0.0        | 2.9        |
| <b>Final Form Total</b>     | <b>2.9</b> | <b>0.0</b> | <b>2.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 98.50                                |
| Aluminum-based Metals/Alloys    | 0.40                                 |
| Other Metals                    | 11.81                                |
| Other Inorganic Materials       | 63.88                                |
| Cellulosics                     | 8.15                                 |
| Rubber                          | 12.23                                |
| Plastics                        | 37.71                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.57                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.36E-01                                   |
| Am-243  | 4.67E-07                                   |
| Np-237  | 4.65E-06                                   |
| Pu-238  | 1.29E+01                                   |
| Pu-239  | 1.11E+00                                   |
| Pu-240  | 2.66E-01                                   |
| Pu-241  | 3.42E+00                                   |
| Pu-242  | 1.53E-04                                   |
| Th-229  | 1.45E-14                                   |
| Th-230  | 3.45E-09                                   |
| Th-232  | 3.11E-18                                   |
| U-233   | 7.76E-11                                   |
| U-234   | 1.70E-04                                   |
| U-235   | 5.37E-07                                   |
| U-236   | 3.15E-08                                   |
| U-238   | 9.24E-14                                   |

## Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D019, D022, D039, D040, F001

## TRUCON Code(s)

125/225

## Waste Stream Description

Combustible and NonCombustible

Waste Stream ID: LA-TA-55-12

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                   |                                       |          |    |
|-------------|--|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | Combustible and NonCombustible                     |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner       | 3.1        | 0.0        | 3.1        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 3.8        | 0.0        | 3.8        |
| <b>Current Form Total</b>         | <b>6.9</b> | <b>0.0</b> | <b>6.9</b> |

| Final Form Volumes                |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner       | 3.1        | 0.0        | 3.1        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 3.8        | 0.0        | 3.8        |
| <b>Final Form Total</b>           | <b>6.9</b> | <b>0.0</b> | <b>6.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 48.59                                |
| Aluminum-based Metals/Alloys    | 0.20                                 |
| Other Metals                    | 5.82                                 |
| Other Inorganic Materials       | 31.51                                |
| Cellulosics                     | 4.02                                 |
| Rubber                          | 6.03                                 |
| Plastics                        | 18.60                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.77                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 174.79                               |
| Packaging Material, Plastic     | 25.66                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.39E-02                                   |
| Np-237  | 6.40E-07                                   |
| Pu-238  | 5.71E+01                                   |
| Pu-239  | 1.08E-01                                   |
| Pu-240  | 3.71E-02                                   |
| Pu-241  | 1.00E+00                                   |
| Pu-242  | 1.83E-05                                   |
| Th-229  | 7.17E-15                                   |
| Th-230  | 1.55E-07                                   |
| Th-232  | 1.74E-18                                   |
| U-233   | 1.98E-11                                   |
| U-234   | 2.81E-03                                   |
| U-235   | 3.32E-05                                   |
| U-236   | 8.80E-09                                   |
| U-238   | 1.27E-07                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Combustible and NonCombustible

Waste Stream ID: LA-TA-55-14

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                       |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory          | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3120      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Cemented Inorganics                     | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |             |              |
|-----------------------------|-------------|-------------|--------------|
| Container Type              | Stored      | Proj.       | Total        |
| 55-gal Drum Dir Ld w/ Liner | 66.8        | 74.3        | 141.0        |
| <b>Current Form Total</b>   | <b>66.8</b> | <b>74.3</b> | <b>141.0</b> |

| Final Form Volumes          |             |             |              |
|-----------------------------|-------------|-------------|--------------|
| Container Type              | Stored      | Proj.       | Total        |
| 55-gal Drum Dir Ld w/ Liner | 66.8        | 74.3        | 141.0        |
| <b>Final Form Total</b>     | <b>66.8</b> | <b>74.3</b> | <b>141.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.13                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.07                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 7.01                                 |
| Cements                         | 1310.00                              |
| Inorganic Matrix                | 1314.76                              |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.41E+01                                   |
| Np-237  | 3.39E-04                                   |
| Pu-238  | 3.49E+00                                   |
| Pu-239  | 1.26E+01                                   |
| Pu-240  | 3.14E+00                                   |
| Pu-241  | 3.22E+01                                   |
| Pu-242  | 1.00E-02                                   |
| Pu-244  | 7.58E-09                                   |
| Th-229  | 2.79E-12                                   |
| Th-230  | 5.72E-09                                   |
| Th-232  | 2.78E-16                                   |
| U-233   | 8.09E-09                                   |
| U-234   | 1.14E-04                                   |
| U-235   | 1.42E-05                                   |
| U-236   | 1.02E-06                                   |
| U-238   | 5.93E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

114/214

## Waste Stream Description

Cemented Inorganics

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LA-TA-55-15

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory          | Final Waste Form                      | Salt Waste      | Waste Matrix Code | S3140      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Pyrochemical salts                      | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |             |            |             |
|---|-------------|------------|-------------|
| Container Type                          | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner             | 17.7        | 0.0        | 17.7        |
| 55-gal POC - 12" w/ Liner               | 0.4         | 0.0        | 0.4         |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.3         | 0.0        | 0.3         |
| <b>Current Form Total</b>               | <b>18.4</b> | <b>0.0</b> | <b>18.4</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 17.9        | 0.0        | 17.9        |
| 55-gal POC - 12" w/ Liner   | 0.4         | 0.0        | 0.4         |
| <b>Final Form Total</b>     | <b>18.3</b> | <b>0.0</b> | <b>18.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 61.98                                |
| Aluminum-based Metals/Alloys    | 0.25                                 |
| Other Metals                    | 7.43                                 |
| Other Inorganic Materials       | 40.19                                |
| Cellulosics                     | 5.13                                 |
| Rubber                          | 7.69                                 |
| Plastics                        | 23.73                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.99                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 139.81                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 3.13                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.29E+00                                   |
| Np-237  | 1.19E-05                                   |
| Pu-238  | 5.48E+01                                   |
| Pu-239  | 2.92E+01                                   |
| Pu-240  | 7.13E+00                                   |
| Pu-241  | 6.77E+01                                   |
| Pu-242  | 5.14E-04                                   |
| Th-229  | 7.30E-14                                   |
| Th-230  | 7.38E-08                                   |
| Th-232  | 5.22E-16                                   |
| U-233   | 2.42E-10                                   |
| U-234   | 1.62E-03                                   |
| U-235   | 2.88E-07                                   |
| U-236   | 2.11E-06                                   |
| U-238   | 7.76E-13                                   |

## Haz. Waste No(s).

D007, D008, D009

## TRUCON Code(s)

116/216, 124/224

## Waste Stream Description

Pyrochemical salts



Waste Stream ID: **LA-TA-55-17B**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                                       |            |          |    |
|-------------|---|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory          | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3120      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | ORGANIC LIQUIDS ABSORBED ON VERMICULITE |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.9        | 2.5        | 5.4        |
| <b>Current Form Total</b>   | <b>2.9</b> | <b>2.5</b> | <b>5.4</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.9        | 2.5        | 5.4        |
| <b>Final Form Total</b>     | <b>2.9</b> | <b>2.5</b> | <b>5.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.01                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.30                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 55.57                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.91E-02                                   |
| Np-237  | 5.81E-08                                   |
| Pu-238  | 2.42E-01                                   |
| Pu-239  | 2.32E-01                                   |
| Pu-240  | 5.51E-02                                   |
| Pu-241  | 5.74E-01                                   |
| Pu-242  | 3.18E-06                                   |
| Th-229  | 1.77E-16                                   |
| Th-230  | 1.57E-10                                   |
| Th-232  | 1.98E-18                                   |
| U-233   | 8.31E-13                                   |
| U-234   | 4.94E-06                                   |
| U-235   | 1.60E-09                                   |
| U-236   | 1.14E-08                                   |
| U-238   | 3.35E-15                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D027, D028, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D043, F001, F002, F003, F005

## TRUCON Code(s)

112/212

## Waste Stream Description

ORGANIC LIQUIDS ABSORBED ON VERMICULITE

Waste Stream ID: **LA-TA-55-18**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Graphite   | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |            |            |            |
|---|------------|------------|------------|
| Container Type                          | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner             | 1.7        | 0.0        | 1.7        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 1.3        | 0.0        | 1.3        |
| <b>Current Form Total</b>               | <b>3.0</b> | <b>0.0</b> | <b>3.0</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.5        | 0.0        | 2.5        |
| <b>Final Form Total</b>     | <b>2.5</b> | <b>0.0</b> | <b>2.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 64.90                                |
| Aluminum-based Metals/Alloys    | 0.26                                 |
| Other Metals                    | 7.78                                 |
| Other Inorganic Materials       | 42.09                                |
| Cellulosics                     | 5.37                                 |
| Rubber                          | 8.06                                 |
| Plastics                        | 24.85                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.03                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.71E-01                                   |
| Np-237  | 1.14E-06                                   |
| Pu-238  | 4.80E+01                                   |
| Pu-239  | 7.35E+00                                   |
| Pu-240  | 7.80E-01                                   |
| Pu-241  | 4.40E+00                                   |
| Pu-242  | 2.19E-03                                   |
| Pu-244  | 2.03E-09                                   |
| Th-229  | 2.14E-14                                   |
| Th-230  | 3.33E-07                                   |
| Th-232  | 2.77E-16                                   |
| U-233   | 3.95E-11                                   |
| U-234   | 3.27E-03                                   |
| U-235   | 1.59E-07                                   |
| U-236   | 5.10E-07                                   |
| U-238   | 7.26E-12                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

115/215

## Waste Stream Description

Graphite

Waste Stream ID: LA-TA-55-19

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Combustible debris waste (mixed)                   | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                     |               |              |               |
|--|---------------|--------------|---------------|
| Container Type                           | Stored        | Proj.        | Total         |
| 110-gal Drum w/ 1 - 55-gal Drum w/ Liner | 2.1           | 0.0          | 2.1           |
| 55-gal Drum Dir Ld w/ Liner              | 544.8         | 174.3        | 719.1         |
| 55-gal POC - 12" w/ Liner                | 5.2           | 0.0          | 5.2           |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner  | 255.0         | 0.0          | 255.0         |
| Cask - Misc w/ 1 - 30-gal Drum           | 28.4          | 0.0          | 28.4          |
| SWB w/ 4 - 55-gal Drums w/ Liners        | 2532.6        | 0.0          | 2532.6        |
| <b>Current Form Total</b>                | <b>3368.1</b> | <b>174.3</b> | <b>3542.4</b> |

| Final Form Volumes                |               |              |               |
|-----------------------------------|---------------|--------------|---------------|
| Container Type                    | Stored        | Proj.        | Total         |
| 55-gal Drum Dir Ld w/ Liner       | 725.3         | 174.3        | 899.6         |
| 55-gal POC - 12" w/ Liner         | 5.2           | 0.0          | 5.2           |
| SWB w/ 4 - 55-gal Drums w/ Liners | 2532.6        | 0.0          | 2532.6        |
| <b>Final Form Total</b>           | <b>3263.1</b> | <b>174.3</b> | <b>3437.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 7.72                                 |
| Aluminum-based Metals/Alloys    | 0.38                                 |
| Other Metals                    | 1.12                                 |
| Other Inorganic Materials       | 2.01                                 |
| Cellulosics                     | 30.45                                |
| Rubber                          | 6.20                                 |
| Plastics                        | 42.63                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.77                                 |
| Organic Matrix                  | 0.65                                 |
| Soils/gravel                    | 0.60                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 190.56                               |
| Packaging Material, Plastic     | 21.75                                |
| Packaging Material, Cellulosics | 0.21                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.98E-01                                   |
| Am-243  | 1.68E-06                                   |
| Cm-244  | 4.31E-05                                   |
| Cs-137  | 1.65E-09                                   |
| Np-237  | 2.31E-06                                   |
| Pu-238  | 3.36E+00                                   |
| Pu-239  | 1.03E+00                                   |
| Pu-240  | 2.97E-01                                   |
| Pu-241  | 1.77E+00                                   |
| Pu-242  | 7.44E-04                                   |
| Pu-244  | 6.40E-10                                   |
| Sr-90   | 6.15E-10                                   |
| Th-229  | 4.51E-08                                   |
| Th-230  | 5.35E-08                                   |
| Th-232  | 7.00E-12                                   |
| U-233   | 1.78E-05                                   |
| U-234   | 3.59E-04                                   |
| U-235   | 2.18E-06                                   |
| U-236   | 5.07E-07                                   |
| U-238   | 1.70E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D028, D035, D038, D039, D040, F001, F002, F003, F005, P120

## TRUCON Code(s)

116/216, 117/217, 125/225

## Waste Stream Description

Combustible waste generated from facility and equipment operations and maintenance. This waste includes paper, rags, plastic, rubber, wood-based HEPA filters, and plastic-based and cellulose-based waste generated at the facility. Plastic-based waste includes, but may not be limited to, tape, polyethylene and vinyl; gloves; plastic vials; polystyrene; Tygon tubing; polyvinyl chloride plastic; Teflon products; Plexiglas; and dry box gloves (unleaded neoprene base). Cellulose-based waste includes, but may not be limited to, rags, wood, paper, cardboard, laboratory coats and coveralls, booties and cotton gloves, and similar materials. The waste stream may also contain a smaller fraction of non-combustible solids (e.g., scrap metal, crucibles, metal lids, zippers, discarded tools) and a small fraction of homogenous solids, salts, leached solids, ash, hydroxide cakes, crucibles, impure oxides.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LA-TA-55-19.01-S

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                |                       |                 |                   |                                       |          |    |
|-------------|--------------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | N/A                            | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                            |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | WP-LA-TA-55-19.01 | 0.2         |
| 55-gal Drum Dir Ld w/o Liner | WP-LA-TA-55-19.01 | 5.6         |
| SWB Dir Ld w/o Liner         | WP-LA-TA-55-19.01 | 75.6        |
| <b>Shipped Total</b>         |                   | <b>81.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 51.12                                |
| Aluminum-based Metals/Alloys | 0.03                                 |
| Other Metals                 | 0.10                                 |
| Other Inorganic Materials    | 0.27                                 |
| Cellulosics                  | 6.20                                 |
| Rubber                       | 2.18                                 |
| Plastics                     | 26.49                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.02E-01                                   |
| Am-243  | 5.37E-05                                   |
| Cs-137  | 1.13E-08                                   |
| Np-237  | 4.87E-05                                   |
| Pu-238  | 2.49E-01                                   |
| Pu-239  | 3.06E+00                                   |
| Pu-240  | 7.56E-01                                   |
| Pu-241  | 7.48E+00                                   |
| Pu-242  | 2.05E-03                                   |
| Th-229  | 3.45E-13                                   |
| Th-230  | 4.19E-07                                   |
| Th-232  | 1.99E-17                                   |
| U-233   | 1.23E-09                                   |
| U-234   | 1.45E-03                                   |
| U-235   | 2.80E-06                                   |
| U-236   | 1.34E-07                                   |
| U-238   | 4.75E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

## TRUCON Code(s)

116/216, 125/225, 154

## Waste Stream Description

N/A

Waste Stream ID: LA-TA-55-19.02-S

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                |                       |                 |                   |                                       |          |    |
|-------------|--------------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5300                                 | Handling | CH |
| Source Cat. | N/A                            | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                            |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                    |                   |              |
|------------------------------------|-------------------|--------------|
| Container Type                     | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner        | WP-LA-TA-55-19.02 | 16.0         |
| 55-gal Drum Dir Ld w/o Liner       | WP-LA-TA-55-19.02 | 171.4        |
| SWB Dir Ld w/o Liner               | WP-LA-TA-55-19.02 | 13.2         |
| SWB w/ 4 - 55-gal Drums w/ Liners  | WP-LA-TA-55-19.02 | 1.9          |
| SWB w/ 4 - 55-gal Drums w/o Liners | WP-LA-TA-55-19.02 | 26.5         |
| <b>Shipped Total</b>               |                   | <b>229.0</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 10.64                                |
| Aluminum-based Metals/Alloys | 0.02                                 |
| Other Metals                 | 0.66                                 |
| Other Inorganic Materials    | 3.05                                 |
| Cellulosics                  | 39.08                                |
| Rubber                       | 4.67                                 |
| Plastics                     | 62.20                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.03                                 |
| Soils/gravel                 | 0.18                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.63E+00                                   |
| Am-243  | 3.38E-04                                   |
| Cs-137  | 2.42E-06                                   |
| Np-237  | 9.45E-05                                   |
| Pu-238  | 8.91E-01                                   |
| Pu-239  | 3.57E+00                                   |
| Pu-240  | 9.97E-01                                   |
| Pu-241  | 1.39E+01                                   |
| Pu-242  | 5.43E-03                                   |
| Sr-90   | 2.25E-06                                   |
| Th-229  | 7.44E-09                                   |
| Th-230  | 7.46E-06                                   |
| Th-232  | 8.99E-08                                   |
| U-233   | 1.98E-05                                   |
| U-234   | 3.52E-03                                   |
| U-235   | 4.17E-06                                   |
| U-236   | 1.18E-07                                   |
| U-238   | 6.67E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

## TRUCON Code(s)

116/216, 125/225

## Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LA-TA-55-20

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Combustible debris waste (non-mixed)               | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |             |            |             |
|---|-------------|------------|-------------|
| Container Type                          | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner             | 52.8        | 0.0        | 52.8        |
| 55-gal POC - 12" w/ Liner               | 0.2         | 0.0        | 0.2         |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.3         | 0.0        | 0.3         |
| SWB w/ 4 - 55-gal Drums w/ Liners       | 1.9         | 0.0        | 1.9         |
| <b>Current Form Total</b>               | <b>55.3</b> | <b>0.0</b> | <b>55.3</b> |

| Final Form Volumes                |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner       | 53.0        | 0.0        | 53.0        |
| 55-gal POC - 12" w/ Liner         | 0.2         | 0.0        | 0.2         |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9         | 0.0        | 1.9         |
| <b>Final Form Total</b>           | <b>55.1</b> | <b>0.0</b> | <b>55.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 6.37                                 |
| Aluminum-based Metals/Alloys    | 0.18                                 |
| Other Metals                    | 0.38                                 |
| Other Inorganic Materials       | 2.75                                 |
| Cellulosics                     | 18.97                                |
| Rubber                          | 0.89                                 |
| Plastics                        | 78.42                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.18                                 |
| Organic Matrix                  | 0.18                                 |
| Soils/gravel                    | 0.87                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 135.05                               |
| Packaging Material, Plastic     | 36.29                                |
| Packaging Material, Cellulosics | 0.52                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.19E-01                                   |
| Am-243  | 7.42E-06                                   |
| Cs-137  | 1.98E-08                                   |
| Np-237  | 2.94E-05                                   |
| Pu-238  | 3.29E+01                                   |
| Pu-239  | 3.42E+00                                   |
| Pu-240  | 8.67E-01                                   |
| Pu-241  | 8.87E+00                                   |
| Pu-242  | 7.25E-03                                   |
| Pu-244  | 2.74E-09                                   |
| Sr-90   | 2.01E-08                                   |
| Th-229  | 1.12E-12                                   |
| Th-230  | 1.84E-07                                   |
| Th-232  | 2.63E-16                                   |
| U-233   | 1.72E-09                                   |
| U-234   | 2.14E-03                                   |
| U-235   | 9.30E-06                                   |
| U-236   | 5.61E-07                                   |
| U-238   | 1.62E-06                                   |

## Haz. Waste No(s).

F001, F002

## TRUCON Code(s)

112/212, 116/216,  
125/225

## Waste Stream Description

Combustible waste generated from facility and equipment operations and maintenance. This waste includes paper, rags, plastic, rubber, wood-based HEPA filters, and plastic-based and cellulose-based waste generated at the facility. Plastic-based waste includes, but may not be limited to, tape, polyethylene and vinyl; gloves; plastic vials; polystyrene; Tygon tubing; polyvinyl chloride plastic; Teflon products; Plexiglas; and dry box gloves (unleaded neoprene base). Cellulose-based waste includes, but may not be limited to, rags, wood, paper, cardboard, laboratory coats and coveralls, booties and cotton gloves, and similar materials. The waste stream may also contain a smaller fraction of non-combustible solids (e.g., scrap metal, crucibles, metal lids, zippers, discarded tools) and a small fraction of homogenous solids, salts, leached solids, ash, hydroxide cakes, crucibles, impure oxides.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LA-TA-55-21

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Metal debris waste (mixed)                         | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |              |            |              |
|---|--------------|------------|--------------|
| Container Type                          | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner             | 110.9        | 0.0        | 110.9        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 84.7         | 0.0        | 84.7         |
| Cask - Misc w/ 1 - 30-gal Drum          | 13.2         | 0.0        | 13.2         |
| Other                                   | 1.2          | 0.0        | 1.2          |
| <b>Current Form Total</b>               | <b>209.9</b> | <b>0.0</b> | <b>209.9</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 172.4        | 0.0        | 172.4        |
| SWB Dir Ld w/ Liner         | 1.9          | 0.0        | 1.9          |
| <b>Final Form Total</b>     | <b>174.3</b> | <b>0.0</b> | <b>174.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 200.50                               |
| Aluminum-based Metals/Alloys    | 0.18                                 |
| Other Metals                    | 7.18                                 |
| Other Inorganic Materials       | 0.85                                 |
| Cellulosics                     | 1.00                                 |
| Rubber                          | 0.32                                 |
| Plastics                        | 5.87                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.86                                 |
| Organic Matrix                  | 0.18                                 |
| Soils/gravel                    | 0.56                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 131.05                               |
| Packaging Material, Plastic     | 36.61                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.45E-01                                   |
| Am-243  | 4.72E-07                                   |
| Cs-137  | 1.02E-09                                   |
| Np-237  | 3.37E-06                                   |
| Pu-238  | 1.52E+01                                   |
| Pu-239  | 3.93E+00                                   |
| Pu-240  | 1.08E+00                                   |
| Pu-241  | 5.54E+00                                   |
| Pu-242  | 1.15E-03                                   |
| Pu-244  | 9.16E-10                                   |
| Sr-90   | 9.36E-10                                   |
| Th-229  | 1.38E-13                                   |
| Th-230  | 2.25E-07                                   |
| Th-232  | 1.30E-15                                   |
| U-233   | 1.72E-10                                   |
| U-234   | 1.55E-03                                   |
| U-235   | 3.96E-06                                   |
| U-236   | 1.39E-06                                   |
| U-238   | 1.74E-05                                   |

## Haz. Waste No(s).

D008, D019, D040

## TRUCON Code(s)

116/216, 117/217

## Waste Stream Description

Metal Noncombustible waste including small tools, small equipment, cans, motors, pumps, process equipment, gloveboxes, ventilation ductwork, and pipes. May also contain some glass, ceramic, porcelain, etc. as well as some small fraction of combustible waste (e.g., paper, rubber, plastics).

Waste Stream ID: LA-TA-55-22

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Metal debris waste (non-mixed)                     | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |             |            |             |
|---|-------------|------------|-------------|
| Container Type                          | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner             | 29.3        | 0.0        | 29.3        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 1.6         | 0.0        | 1.6         |
| Other                                   | 23.9        | 0.0        | 23.9        |
| SWB w/ 4 - 55-gal Drums w/ Liners       | 34.0        | 0.0        | 34.0        |
| <b>Current Form Total</b>               | <b>88.9</b> | <b>0.0</b> | <b>88.9</b> |

| Final Form Volumes                |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner       | 30.4        | 0.0        | 30.4        |
| SWB Dir Ld w/ Liner               | 24.6        | 0.0        | 24.6        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 34.0        | 0.0        | 34.0        |
| <b>Final Form Total</b>           | <b>89.0</b> | <b>0.0</b> | <b>89.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 165.00                               |
| Aluminum-based Metals/Alloys    | 0.20                                 |
| Other Metals                    | 4.50                                 |
| Other Inorganic Materials       | 0.40                                 |
| Cellulosics                     | 0.40                                 |
| Rubber                          | 0.80                                 |
| Plastics                        | 3.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.10                                 |
| Organic Matrix                  | 0.70                                 |
| Soils/gravel                    | 0.10                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 167.78                               |
| Packaging Material, Plastic     | 19.20                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.92E-01                                   |
| Am-243  | 7.72E-07                                   |
| Cm-244  | 4.98E-03                                   |
| Cs-137  | 3.76E-08                                   |
| Np-237  | 1.25E-06                                   |
| Pu-238  | 3.09E+01                                   |
| Pu-239  | 1.01E+00                                   |
| Pu-240  | 2.51E-01                                   |
| Pu-241  | 2.33E+00                                   |
| Pu-242  | 2.31E-04                                   |
| Pu-244  | 2.11E-10                                   |
| Sr-90   | 9.74E-09                                   |
| Th-229  | 3.52E-14                                   |
| Th-230  | 1.10E-07                                   |
| Th-232  | 5.34E-17                                   |
| U-233   | 5.63E-11                                   |
| U-234   | 1.49E-03                                   |
| U-235   | 1.72E-07                                   |
| U-236   | 1.27E-07                                   |
| U-238   | 7.44E-08                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

117/217

## Waste Stream Description

Metal Noncombustible waste including small tools, small equipment, cans, motors, pumps, process equipment, gloveboxes, ventilation ductwork, and pipes. May also contain some glass, ceramic, porcelain, etc. as well as some small fraction of combustible waste (e.g., paper, rubber, plastics).

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.



Waste Stream ID: **LA-TA-55-23**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Glass debris waste from PF-4 (mixed)               | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |             |            |             |
|---|-------------|------------|-------------|
| Container Type                          | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner             | 18.3        | 0.0        | 18.3        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 24.2        | 0.0        | 24.2        |
| Cask - Misc w/ 1 - 30-gal Drum          | 0.8         | 0.0        | 0.8         |
| <b>Current Form Total</b>               | <b>43.3</b> | <b>0.0</b> | <b>43.3</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 34.3        | 0.0        | 34.3        |
| <b>Final Form Total</b>     | <b>34.3</b> | <b>0.0</b> | <b>34.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 4.52                                 |
| Aluminum-based Metals/Alloys    | 0.71                                 |
| Other Metals                    | 0.62                                 |
| Other Inorganic Materials       | 93.79                                |
| Cellulosics                     | 1.29                                 |
| Rubber                          | 0.44                                 |
| Plastics                        | 7.66                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.55                                 |
| Organic Matrix                  | 1.52                                 |
| Soils/gravel                    | 2.44                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.41E-01                                   |
| Am-243  | 5.93E-07                                   |
| Np-237  | 5.61E-06                                   |
| Pu-238  | 5.26E+00                                   |
| Pu-239  | 6.12E+00                                   |
| Pu-240  | 1.59E+00                                   |
| Pu-241  | 8.31E+00                                   |
| Pu-242  | 1.76E-04                                   |
| Th-229  | 3.20E-13                                   |
| Th-230  | 5.18E-08                                   |
| Th-232  | 8.21E-16                                   |
| U-233   | 3.47E-10                                   |
| U-234   | 4.30E-04                                   |
| U-235   | 6.91E-07                                   |
| U-236   | 1.25E-06                                   |
| U-238   | 1.24E-08                                   |

## Haz. Waste No(s).

D019, D040

## TRUCON Code(s)

118/218, 125/225

## Waste Stream Description

Glass waste generated from facility and equipment operations and maintenance. This waste includes, but is not limited to, broken glass discarded labware, windows, and bottles. A small fraction of combustible waste, such as plastics (mainly packaging), may also be present in this waste stream.

Waste Stream ID: **LA-TA-55-24**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Glass debris waste from PF-4 (non-mixed)           |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 5.2        | 0.0        | 5.2        |
| <b>Current Form Total</b>   | <b>5.2</b> | <b>0.0</b> | <b>5.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 5.2        | 0.0        | 5.2        |
| <b>Final Form Total</b>     | <b>5.2</b> | <b>0.0</b> | <b>5.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.21                                 |
| Aluminum-based Metals/Alloys    | 0.18                                 |
| Other Metals                    | 0.18                                 |
| Other Inorganic Materials       | 106.29                               |
| Cellulosics                     | 0.18                                 |
| Rubber                          | 0.18                                 |
| Plastics                        | 3.34                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.18                                 |
| Organic Matrix                  | 0.18                                 |
| Soils/gravel                    | 0.18                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.39E-01                                   |
| Am-243  | 1.23E-05                                   |
| Np-237  | 4.99E-05                                   |
| Pu-238  | 1.66E+01                                   |
| Pu-239  | 4.20E+00                                   |
| Pu-240  | 1.01E+00                                   |
| Pu-241  | 8.49E+00                                   |
| Pu-242  | 7.46E-05                                   |
| Th-229  | 1.94E-12                                   |
| Th-230  | 7.71E-08                                   |
| Th-232  | 3.06E-16                                   |
| U-233   | 2.97E-09                                   |
| U-234   | 9.54E-04                                   |
| U-235   | 2.82E-05                                   |
| U-236   | 6.51E-07                                   |
| U-238   | 6.08E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

118/218, 125/225

## Waste Stream Description

Glass waste generated from facility and equipment operations and maintenance. This waste includes, but is not limited to, broken glass discarded labware, windows, and bottles. A small fraction of combustible waste, such as plastics (mainly packaging), may also be present in this waste stream.

Waste Stream ID: LA-TA-55-25

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | HEPA filter debris (mixed)                         | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |             |            |             |
|---|-------------|------------|-------------|
| Container Type                          | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner             | 2.3         | 0.0        | 2.3         |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 11.9        | 0.0        | 11.9        |
| SWB w/ 4 - 55-gal Drums w/ Liners       | 5.7         | 0.0        | 5.7         |
| <b>Current Form Total</b>               | <b>19.9</b> | <b>0.0</b> | <b>19.9</b> |

| Final Form Volumes                |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner       | 10.0        | 0.0        | 10.0        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 5.7         | 0.0        | 5.7         |
| <b>Final Form Total</b>           | <b>15.7</b> | <b>0.0</b> | <b>15.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 14.79                                |
| Aluminum-based Metals/Alloys    | 0.18                                 |
| Other Metals                    | 0.18                                 |
| Other Inorganic Materials       | 0.18                                 |
| Cellulosics                     | 4.09                                 |
| Rubber                          | 0.18                                 |
| Plastics                        | 3.57                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.18                                 |
| Organic Matrix                  | 0.18                                 |
| Soils/gravel                    | 0.18                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 159.89                               |
| Packaging Material, Plastic     | 29.50                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.88E-01                                   |
| Am-243  | 3.14E-06                                   |
| Np-237  | 7.10E-06                                   |
| Pu-238  | 3.97E+01                                   |
| Pu-239  | 8.93E+00                                   |
| Pu-240  | 1.95E+00                                   |
| Pu-241  | 1.09E+01                                   |
| Pu-242  | 1.07E-02                                   |
| Pu-244  | 1.01E-08                                   |
| Th-229  | 3.95E-13                                   |
| Th-230  | 3.02E-07                                   |
| Th-232  | 7.56E-16                                   |
| U-233   | 4.42E-10                                   |
| U-234   | 2.84E-03                                   |
| U-235   | 2.02E-07                                   |
| U-236   | 1.33E-06                                   |
| U-238   | 3.73E-11                                   |

## Haz. Waste No(s).

D007, D008, D009,  
D022, D035, D040,  
F001, F002, F005

## TRUCON Code(s)

119/219

## Waste Stream Description

HEPA filters generated from facility and equipment operations and Maintenance.

Waste Stream ID: LA-TA-55-26

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Hepa Filters                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.3        | 0.0        | 2.3        |
| <b>Current Form Total</b>   | <b>2.3</b> | <b>0.0</b> | <b>2.3</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.3        | 0.0        | 2.3        |
| <b>Final Form Total</b>     | <b>2.3</b> | <b>0.0</b> | <b>2.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 46.54                                |
| Aluminum-based Metals/Alloys    | 0.19                                 |
| Other Metals                    | 5.58                                 |
| Other Inorganic Materials       | 30.18                                |
| Cellulosics                     | 3.85                                 |
| Rubber                          | 5.78                                 |
| Plastics                        | 17.82                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.74                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.51E+00                                   |
| Np-237  | 7.79E-06                                   |
| Pu-238  | 4.96E+01                                   |
| Pu-239  | 7.82E-01                                   |
| Pu-240  | 3.04E-01                                   |
| Pu-241  | 1.03E+01                                   |
| Pu-242  | 3.95E-02                                   |
| Pu-244  | 3.74E-08                                   |
| Th-229  | 1.47E-13                                   |
| Th-230  | 1.54E-07                                   |
| Th-232  | 5.02E-17                                   |
| U-233   | 2.81E-10                                   |
| U-234   | 2.24E-03                                   |
| U-235   | 1.16E-08                                   |
| U-236   | 1.35E-07                                   |
| U-238   | 8.95E-11                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

116/216, 119/219

## Waste Stream Description

Hepa Filters

Waste Stream ID: LA-TA-55-27

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3120      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Inorganic Solid Waste                              | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Current Form Total</b>   | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b>     | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 32.53                                |
| Aluminum-based Metals/Alloys    | 0.13                                 |
| Other Metals                    | 3.90                                 |
| Other Inorganic Materials       | 21.09                                |
| Cellulosics                     | 2.69                                 |
| Rubber                          | 4.04                                 |
| Plastics                        | 12.45                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.52                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.83E-03                                   |
| Np-237  | 2.25E-08                                   |
| Pu-238  | 1.49E-03                                   |
| Pu-239  | 6.10E-02                                   |
| Pu-240  | 1.42E-02                                   |
| Pu-241  | 6.81E-02                                   |
| Pu-242  | 8.24E-07                                   |
| Th-229  | 5.08E-16                                   |
| Th-230  | 1.24E-11                                   |
| Th-232  | 6.02E-18                                   |
| U-233   | 8.56E-13                                   |
| U-234   | 1.11E-07                                   |
| U-235   | 1.44E-09                                   |
| U-236   | 1.02E-08                                   |
| U-238   | 2.98E-15                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Inorganic Solid Waste

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **LA-TA-55-28**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Leaded glove debris (mixed)                        | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.0        | 0.0        | 1.0        |
| <b>Current Form Total</b>   | <b>1.0</b> | <b>0.0</b> | <b>1.0</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.0        | 0.0        | 1.0        |
| <b>Final Form Total</b>     | <b>1.0</b> | <b>0.0</b> | <b>1.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 257.70                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 302.90                               |
| Other Inorganic Materials       | 6.80                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.39E-01                                   |
| Np-237  | 3.26E-07                                   |
| Pu-238  | 6.55E-02                                   |
| Pu-239  | 4.60E+00                                   |
| Pu-240  | 5.70E-01                                   |
| Pu-241  | 4.86E+00                                   |
| Pu-242  | 3.29E-05                                   |
| Th-229  | 2.02E-15                                   |
| Th-230  | 1.51E-10                                   |
| Th-232  | 7.07E-17                                   |
| U-233   | 6.43E-12                                   |
| U-234   | 2.55E-06                                   |
| U-235   | 5.90E-08                                   |
| U-236   | 2.20E-07                                   |
| U-238   | 6.46E-14                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

116/216, 123/223

## Waste Stream Description

Leaded gloves generated from facility and equipment operations and maintenance.

Waste Stream ID: LA-TA-55-29

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Leaded Gloves                                      | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |            |            |            |
|---|------------|------------|------------|
| Container Type                          | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner             | 8.1        | 0.0        | 8.1        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.3        | 0.0        | 0.3        |
| <b>Current Form Total</b>               | <b>8.4</b> | <b>0.0</b> | <b>8.4</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 8.3        | 0.0        | 8.3        |
| <b>Final Form Total</b>     | <b>8.3</b> | <b>0.0</b> | <b>8.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 149.69                               |
| Aluminum-based Metals/Alloys    | 0.61                                 |
| Other Metals                    | 17.94                                |
| Other Inorganic Materials       | 97.07                                |
| Cellulosics                     | 12.39                                |
| Rubber                          | 18.58                                |
| Plastics                        | 57.31                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 2.39                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.33E-01                                   |
| Np-237  | 6.62E-07                                   |
| Pu-238  | 2.67E+02                                   |
| Pu-239  | 6.07E-01                                   |
| Pu-240  | 2.09E-01                                   |
| Pu-241  | 6.01E+00                                   |
| Pu-242  | 5.71E-03                                   |
| Pu-244  | 4.35E-09                                   |
| Th-229  | 5.48E-15                                   |
| Th-230  | 6.16E-07                                   |
| Th-232  | 2.59E-17                                   |
| U-233   | 1.53E-11                                   |
| U-234   | 1.04E-02                                   |
| U-235   | 7.79E-09                                   |
| U-236   | 8.06E-08                                   |
| U-238   | 1.12E-11                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

123/223

## Waste Stream Description

Leaded Gloves

Waste Stream ID: LA-TA-55-30

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                       | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste   | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Non-combustible and combustible debris waste (mixed) |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |              |              |               |
|---|--------------|--------------|---------------|
| Container Type                          | Stored       | Proj.        | Total         |
| 30-gal Drum                             | 0.1          | 0.0          | 0.1           |
| 55-gal Drum Dir Ld w/ Liner             | 430.6        | 174.3        | 604.9         |
| 55-gal POC - 12" w/ Liner               | 3.5          | 0.0          | 3.5           |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 141.7        | 0.0          | 141.7         |
| Box - Crate                             | 7.2          | 0.0          | 7.2           |
| Cask - Misc w/ 2 - 30-gal Drums         | 27.2         | 0.0          | 27.2          |
| Other                                   | 340.2        | 0.0          | 340.2         |
| SWB w/ 4 - 55-gal Drums w/ Liners       | 11.3         | 0.0          | 11.3          |
| <b>Current Form Total</b>               | <b>961.9</b> | <b>174.3</b> | <b>1136.2</b> |

| Final Form Volumes                |              |              |               |
|-----------------------------------|--------------|--------------|---------------|
| Container Type                    | Stored       | Proj.        | Total         |
| 55-gal Drum Dir Ld w/ Liner       | 550.6        | 174.3        | 724.9         |
| 55-gal POC - 12" w/ Liner         | 3.5          | 0.0          | 3.5           |
| SWB Dir Ld w/ Liner               | 347.8        | 0.0          | 347.8         |
| SWB w/ 4 - 55-gal Drums w/ Liners | 11.3         | 0.0          | 11.3          |
| <b>Final Form Total</b>           | <b>913.2</b> | <b>174.3</b> | <b>1087.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 259.90                               |
| Aluminum-based Metals/Alloys    | 0.15                                 |
| Other Metals                    | 113.81                               |
| Other Inorganic Materials       | 7.09                                 |
| Cellulosics                     | 42.79                                |
| Rubber                          | 0.74                                 |
| Plastics                        | 3.52                                 |
| Cements                         | 4.07                                 |
| Inorganic Matrix                | 3.54                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 140.19                               |
| Packaging Material, Plastic     | 25.34                                |
| Packaging Material, Cellulosics | 0.45                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.82E-01                                   |
| Am-243  | 4.43E-06                                   |
| Cs-137  | 3.24E-09                                   |
| Np-237  | 7.96E-06                                   |
| Pu-238  | 1.48E+01                                   |
| Pu-239  | 3.85E+00                                   |
| Pu-240  | 1.04E+00                                   |
| Pu-241  | 6.78E+00                                   |
| Pu-242  | 3.91E-03                                   |
| Pu-244  | 3.42E-09                                   |
| Sr-90   | 3.21E-09                                   |
| Th-229  | 3.56E-09                                   |
| Th-230  | 1.86E-07                                   |
| Th-232  | 3.08E-10                                   |
| U-233   | 8.50E-07                                   |
| U-234   | 1.37E-03                                   |
| U-235   | 3.25E-06                                   |
| U-236   | 1.00E-06                                   |
| U-238   | 3.50E-05                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

## TRUCON Code(s)

116/216, 117/217, 122/222, 123/223, 125/225

## Waste Stream Description

Non-combustible and combustible waste generated from facility and equipment operations and maintenance. This waste includes, but may not be limited to, small tools, small equipment, cans, motors, pumps, process equipment, gloveboxes, ventilation ductwork, metal-based HEPA filters, pipes, glass, graphite, slag and crucibles, salt, discarded lab ware, windows, and bottles. The waste stream may also contain a smaller fraction of combustible solids (e.g., paper, rags, plastic, rubber, leaded gloves) and a small fraction of homogeneous solids (e.g., leached solids, ash, hydroxide cakes, impure oxides).

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.



Waste Stream ID: LA-TA-55-30-S

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                |                       |                 |                   |                                       |          |    |
|-------------|--------------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | N/A                            | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                            |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                    |                   |             |
|------------------------------------|-------------------|-------------|
| Container Type                     | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner        | WP-LA-TA-55-30    | 10.6        |
| 55-gal Drum Dir Ld w/o Liner       | WP-LA-TA-55-30    | 79.0        |
| SWB w/ 4 - 55-gal Drums w/o Liners | WP-LA-TA-55-30    | 5.7         |
| <b>Shipped Total</b>               |                   | <b>95.3</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 213.70                               |
| Aluminum-based Metals/Alloys | 0.41                                 |
| Other Metals                 | 2.45                                 |
| Other Inorganic Materials    | 18.28                                |
| Cellulosics                  | 11.63                                |
| Rubber                       | 1.41                                 |
| Plastics                     | 14.23                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.75                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.21E+00                                   |
| Am-243  | 6.83E-05                                   |
| Cs-137  | 8.63E-05                                   |
| Np-237  | 8.27E-05                                   |
| Pu-238  | 4.74E-01                                   |
| Pu-239  | 2.59E+00                                   |
| Pu-240  | 7.30E-01                                   |
| Pu-241  | 8.66E+00                                   |
| Pu-242  | 6.28E-04                                   |
| Sr-90   | 8.60E-05                                   |
| Th-229  | 4.67E-08                                   |
| Th-230  | 4.69E-09                                   |
| Th-232  | 3.44E-07                                   |
| U-233   | 9.96E-05                                   |
| U-234   | 1.08E-04                                   |
| U-235   | 2.28E-06                                   |
| U-236   | 1.08E-07                                   |
| U-238   | 5.85E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

## TRUCON Code(s)

116/216, 117/217, 125/225, 154

## Waste Stream Description

N/A

Waste Stream ID: **LA-TA-55-31**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Miscellaneous NonCombustible Debris Waste          | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |             |            |             |
|---|-------------|------------|-------------|
| Container Type                          | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner             | 64.3        | 0.0        | 64.3        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.6         | 0.0        | 0.6         |
| Other                                   | 4.6         | 0.0        | 4.6         |
| SWB w/ 4 - 55-gal Drums w/ Liners       | 5.7         | 0.0        | 5.7         |
| <b>Current Form Total</b>               | <b>75.2</b> | <b>0.0</b> | <b>75.2</b> |

| Final Form Volumes                |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner       | 64.7        | 0.0        | 64.7        |
| SWB Dir Ld w/ Liner               | 5.7         | 0.0        | 5.7         |
| SWB w/ 4 - 55-gal Drums w/ Liners | 5.7         | 0.0        | 5.7         |
| <b>Final Form Total</b>           | <b>76.0</b> | <b>0.0</b> | <b>76.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 156.48                               |
| Aluminum-based Metals/Alloys    | 0.63                                 |
| Other Metals                    | 18.76                                |
| Other Inorganic Materials       | 101.48                               |
| Cellulosics                     | 12.95                                |
| Rubber                          | 19.43                                |
| Plastics                        | 59.91                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 2.49                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 138.48                               |
| Packaging Material, Plastic     | 32.79                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.89E-01                                   |
| Am-243  | 1.15E-07                                   |
| Np-237  | 2.69E-06                                   |
| Pu-238  | 5.54E-01                                   |
| Pu-239  | 6.29E+00                                   |
| Pu-240  | 1.62E+00                                   |
| Pu-241  | 1.36E+01                                   |
| Pu-242  | 1.39E-02                                   |
| Pu-244  | 1.30E-08                                   |
| Th-229  | 4.86E-14                                   |
| Th-230  | 1.48E-08                                   |
| Th-232  | 7.63E-16                                   |
| U-233   | 9.01E-11                                   |
| U-234   | 1.02E-04                                   |
| U-235   | 2.44E-06                                   |
| U-236   | 1.27E-06                                   |
| U-238   | 2.09E-07                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

117/217

## Waste Stream Description

Miscellaneous NonCombustible Debris Waste

Waste Stream ID: LA-TA-55-32

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                       |                                       |            |          |    |
|-------------|--|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3120      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Homogeneous inorganic solids (mixed)               |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |            |            |            |
|---|------------|------------|------------|
| Container Type                          | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner             | 3.5        | 0.0        | 3.5        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 1.0        | 0.0        | 1.0        |
| Cask - Misc w/ 2 - 30-gal Drums         | 0.4        | 0.0        | 0.4        |
| SWB w/ 4 - 55-gal Drums w/ Liners       | 3.8        | 0.0        | 3.8        |
| <b>Current Form Total</b>               | <b>8.7</b> | <b>0.0</b> | <b>8.7</b> |

| Final Form Volumes                |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner       | 4.6        | 0.0        | 4.6        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 3.8        | 0.0        | 3.8        |
| <b>Final Form Total</b>           | <b>8.4</b> | <b>0.0</b> | <b>8.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 249.47                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 293.22                               |
| Other Inorganic Materials       | 7.97                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 16.43                                |
| Inorganic Matrix                | 14.28                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 167.13                               |
| Packaging Material, Plastic     | 27.64                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.47E-01                                   |
| Np-237  | 4.56E-06                                   |
| Pu-238  | 3.38E+02                                   |
| Pu-239  | 2.49E+00                                   |
| Pu-240  | 7.14E-01                                   |
| Pu-241  | 6.09E+00                                   |
| Pu-242  | 1.81E-03                                   |
| Pu-244  | 1.57E-09                                   |
| Th-229  | 1.49E-13                                   |
| Th-230  | 2.89E-06                                   |
| Th-232  | 1.77E-15                                   |
| U-233   | 2.12E-10                                   |
| U-234   | 2.57E-02                                   |
| U-235   | 9.13E-06                                   |
| U-236   | 1.75E-06                                   |
| U-238   | 8.44E-08                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

124/224, 125/225

## Waste Stream Description

Homogeneous Inorganic Solids Solidified inorganic process solids generated from facility and equipment operations and maintenance. This waste consists of large chunks of filter cakes and salts.

Waste Stream ID: **LA-TA-55-33**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                       |                                       |            |          |    |
|-------------|--|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3120      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Absorbed organics from all wings of PF4 (mixed)    |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |            |            |            |
|---|------------|------------|------------|
| Container Type                          | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner             | 1.7        | 0.0        | 1.7        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 1.3        | 0.0        | 1.3        |
| <b>Current Form Total</b>               | <b>3.0</b> | <b>0.0</b> | <b>3.0</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.5        | 0.0        | 2.5        |
| <b>Final Form Total</b>     | <b>2.5</b> | <b>0.0</b> | <b>2.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 254.29                               |
| Aluminum-based Metals/Alloys    | 0.21                                 |
| Other Metals                    | 141.79                               |
| Other Inorganic Materials       | 7.32                                 |
| Cellulosics                     | 35.37                                |
| Rubber                          | 0.61                                 |
| Plastics                        | 2.93                                 |
| Cements                         | 7.35                                 |
| Inorganic Matrix                | 6.39                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.12E-01                                   |
| Np-237  | 5.74E-07                                   |
| Pu-238  | 3.43E-02                                   |
| Pu-239  | 3.43E-01                                   |
| Pu-240  | 1.67E-01                                   |
| Pu-241  | 1.38E+00                                   |
| Pu-242  | 5.07E-05                                   |
| Th-229  | 1.53E-14                                   |
| Th-230  | 3.39E-10                                   |
| Th-232  | 8.30E-17                                   |
| U-233   | 2.37E-11                                   |
| U-234   | 2.81E-06                                   |
| U-235   | 8.80E-09                                   |
| U-236   | 1.29E-07                                   |
| U-238   | 1.99E-13                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

111/211

## Waste Stream Description

Solidified Organics (absorbed organics on vermiculite) from all wings of PF4. Organic liquids (solvents and oils) generated from facility and equipment operations and maintenance and absorbed on vermiculite. Hazardous materials such as methylene chloride and carbon tetrachloride may be present but PCB's are NOT expected.

Waste Stream ID: **LA-TA-55-34**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory          | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Uncemented inorganics (mixed)           | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                     |             |            |             |
|--|-------------|------------|-------------|
| Container Type                           | Stored      | Proj.      | Total       |
| 110-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.4         | 0.0        | 0.4         |
| 55-gal Drum Dir Ld w/ Liner              | 39.7        | 0.0        | 39.7        |
| 55-gal POC - 12" w/ Liner                | 8.1         | 0.0        | 8.1         |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner  | 34.8        | 0.0        | 34.8        |
| <b>Current Form Total</b>                | <b>83.0</b> | <b>0.0</b> | <b>83.0</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 62.4        | 0.0        | 62.4        |
| 55-gal POC - 12" w/ Liner   | 8.1         | 0.0        | 8.1         |
| <b>Final Form Total</b>     | <b>70.5</b> | <b>0.0</b> | <b>70.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 2320.00                              |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 176.43                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 15.82                                |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.06E+00                                   |
| Np-237  | 2.42E-05                                   |
| Pu-238  | 8.53E-01                                   |
| Pu-239  | 2.59E+01                                   |
| Pu-240  | 6.53E+00                                   |
| Pu-241  | 3.43E+01                                   |
| Pu-242  | 2.01E-03                                   |
| Pu-244  | 1.37E-09                                   |
| Th-229  | 3.07E-07                                   |
| Th-230  | 4.89E-08                                   |
| Th-232  | 3.08E-15                                   |
| U-233   | 1.37E-04                                   |
| U-234   | 2.58E-04                                   |
| U-235   | 8.55E-06                                   |
| U-236   | 4.93E-06                                   |
| U-238   | 3.97E-04                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

## TRUCON Code(s)

124/224

## Waste Stream Description

Uncemented inorganics from all wings of PF4 including nitrate salts generated from TA-55 nitrate operations

Waste Stream ID: **LA-TA-55-35**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3100      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Cemented Inorganics and Spent Samples              | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |            |            |            |
|---|------------|------------|------------|
| Container Type                          | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner             | 0.4        | 0.0        | 0.4        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 1.6        | 0.0        | 1.6        |
| <b>Current Form Total</b>               | <b>2.0</b> | <b>0.0</b> | <b>2.0</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.5        | 0.0        | 1.5        |
| <b>Final Form Total</b>     | <b>1.5</b> | <b>0.0</b> | <b>1.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.13                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.06                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 6.71                                 |
| Cements                         | 1260.00                              |
| Inorganic Matrix                | 1259.86                              |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.40E+01                                   |
| Np-237  | 3.86E-04                                   |
| Pu-238  | 7.18E-01                                   |
| Pu-239  | 2.08E+01                                   |
| Pu-240  | 4.94E+00                                   |
| Pu-241  | 3.62E+01                                   |
| Pu-242  | 5.94E-03                                   |
| Pu-244  | 5.35E-09                                   |
| Th-229  | 6.69E-12                                   |
| Th-230  | 2.14E-08                                   |
| Th-232  | 1.37E-15                                   |
| U-233   | 1.34E-08                                   |
| U-234   | 1.66E-04                                   |
| U-235   | 4.43E-06                                   |
| U-236   | 2.91E-06                                   |
| U-238   | 3.82E-08                                   |

## Haz. Waste No(s).

D006, D007, D008,  
F001, F002, F003

## TRUCON Code(s)

114/214

## Waste Stream Description

Cemented Inorganics and Spent Samples

Waste Stream ID: **LA-TA-55-36**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3100      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Solidified Inorganic                               | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |             |            |             |
|---|-------------|------------|-------------|
| Container Type                          | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner             | 46.8        | 0.0        | 46.8        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 45.4        | 0.0        | 45.4        |
| Other                                   | 0.3         | 0.0        | 0.3         |
| <b>Current Form Total</b>               | <b>92.5</b> | <b>0.0</b> | <b>92.5</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 76.1        | 0.0        | 76.1        |
| SWB Dir Ld w/ Liner         | 1.9         | 0.0        | 1.9         |
| <b>Final Form Total</b>     | <b>78.0</b> | <b>0.0</b> | <b>78.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.12                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.06                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 6.20                                 |
| Cements                         | 1160.00                              |
| Inorganic Matrix                | 1163.88                              |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 131.35                               |
| Packaging Material, Plastic     | 36.13                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.60E+01                                   |
| Np-237  | 5.65E-04                                   |
| Pu-238  | 3.95E+00                                   |
| Pu-239  | 1.43E+01                                   |
| Pu-240  | 3.45E+00                                   |
| Pu-241  | 2.43E+01                                   |
| Pu-242  | 7.44E-03                                   |
| Pu-244  | 6.10E-09                                   |
| Th-229  | 1.25E-11                                   |
| Th-230  | 5.04E-08                                   |
| Th-232  | 8.46E-16                                   |
| U-233   | 2.21E-08                                   |
| U-234   | 4.17E-04                                   |
| U-235   | 8.48E-06                                   |
| U-236   | 1.87E-06                                   |
| U-238   | 2.37E-04                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D039

## TRUCON Code(s)

114/214

## Waste Stream Description

Solidified Inorganic

Waste Stream ID: **LA-TA-55-37**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3100      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Solidified Inorganic                               | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 3.3        | 0.0        | 3.3        |
| <b>Current Form Total</b>   | <b>3.3</b> | <b>0.0</b> | <b>3.3</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 3.3        | 0.0        | 3.3        |
| <b>Final Form Total</b>     | <b>3.3</b> | <b>0.0</b> | <b>3.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.16                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.08                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 8.24                                 |
| Cements                         | 1550.00                              |
| Inorganic Matrix                | 1545.91                              |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.76E+01                                   |
| Np-237  | 6.82E-05                                   |
| Pu-238  | 2.89E-01                                   |
| Pu-239  | 6.07E+00                                   |
| Pu-240  | 1.69E+00                                   |
| Pu-241  | 1.98E+01                                   |
| Pu-242  | 2.04E-04                                   |
| Th-229  | 6.62E-13                                   |
| Th-230  | 1.20E-06                                   |
| Th-232  | 1.78E-16                                   |
| U-233   | 1.77E-09                                   |
| U-234   | 1.11E-02                                   |
| U-235   | 4.57E-04                                   |
| U-236   | 6.01E-07                                   |
| U-238   | 1.35E-02                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

114/214

## Waste Stream Description

Solidified Inorganic



Waste Stream ID: **LA-TA-55-38**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3100      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Cemented inorganics (mixed)                        | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                     |              |            |              |
|--|--------------|------------|--------------|
| Container Type                           | Stored       | Proj.      | Total        |
| 110-gal Drum w/ 1 - 55-gal Drum w/ Liner | 1.7          | 0.0        | 1.7          |
| 55-gal Drum Dir Ld w/ Liner              | 259.2        | 0.0        | 259.2        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner  | 168.7        | 0.0        | 168.7        |
| Cask - Misc w/ 2 - 30-gal Drums          | 5.6          | 0.0        | 5.6          |
| <b>Current Form Total</b>                | <b>435.2</b> | <b>0.0</b> | <b>435.2</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 374.8        | 0.0        | 374.8        |
| <b>Final Form Total</b>     | <b>374.8</b> | <b>0.0</b> | <b>374.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 212.31                               |
| Aluminum-based Metals/Alloys    | 0.15                                 |
| Other Metals                    | 135.78                               |
| Other Inorganic Materials       | 13.26                                |
| Cellulosics                     | 25.61                                |
| Rubber                          | 0.44                                 |
| Plastics                        | 2.12                                 |
| Cements                         | 89.96                                |
| Inorganic Matrix                | 80.15                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.43E+01                                   |
| Am-243  | 1.06E-03                                   |
| Np-237  | 2.09E-04                                   |
| Pu-238  | 7.20E+00                                   |
| Pu-239  | 1.75E+01                                   |
| Pu-240  | 4.85E+00                                   |
| Pu-241  | 2.73E+01                                   |
| Pu-242  | 4.88E-03                                   |
| Pu-244  | 3.83E-09                                   |
| Th-229  | 6.51E-07                                   |
| Th-230  | 1.96E-07                                   |
| Th-232  | 6.15E-06                                   |
| U-233   | 2.57E-04                                   |
| U-234   | 1.10E-03                                   |
| U-235   | 1.91E-05                                   |
| U-236   | 4.92E-06                                   |
| U-238   | 7.22E-04                                   |

## Haz. Waste No(s).

D006, D007, D008, D011

## TRUCON Code(s)

111/211

## Waste Stream Description

Cemented Inorganics and Spent Samples Solidified inorganic process solids generated from facility and equipment operations and maintenance. This waste includes process leached solids, ash, filter cakes, salts, metal oxides, fines, evaporator bottoms, and sample residues (received from the CMR building) stabilized in Portland or gypsum cement.

Waste Stream ID: **LA-TA-55-39**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory          | Final Waste Form                      | Salt Waste      | Waste Matrix Code | S3140      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Pyrochemical salts (mixed)              | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |             |            |             |
|---|-------------|------------|-------------|
| Container Type                          | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner             | 54.3        | 0.0        | 54.3        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 23.2        | 0.0        | 23.2        |
| <b>Current Form Total</b>               | <b>77.5</b> | <b>0.0</b> | <b>77.5</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 69.3        | 0.0        | 69.3        |
| <b>Final Form Total</b>     | <b>69.3</b> | <b>0.0</b> | <b>69.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 257.70                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 302.90                               |
| Other Inorganic Materials       | 6.80                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.05E+00                                   |
| Np-237  | 1.89E-05                                   |
| Pu-238  | 1.46E+00                                   |
| Pu-239  | 4.89E+01                                   |
| Pu-240  | 1.15E+01                                   |
| Pu-241  | 5.72E+01                                   |
| Pu-242  | 3.92E-03                                   |
| Pu-244  | 2.99E-09                                   |
| Th-229  | 4.26E-13                                   |
| Th-230  | 1.26E-08                                   |
| Th-232  | 4.87E-15                                   |
| U-233   | 7.18E-10                                   |
| U-234   | 1.11E-04                                   |
| U-235   | 1.22E-06                                   |
| U-236   | 8.21E-06                                   |
| U-238   | 5.50E-10                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

124/224

## Waste Stream Description

Pyrochemical salt waste consisting of used chloride salts from pyrochemical processes such as electrorefining, molten salt extraction, salt stripping, fluoride reduction, and direct oxide reduction. A small fraction of combustible waste, such as plastics (mainly packaging), may also be present in this waste stream.

Waste Stream ID: **LA-TA-55-40**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                     |                   |            |          |    |
|-------------|---|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory          | Final Waste Form                      | Solidified Organics | Waste Matrix Code | S3200      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Cemented Organics                       | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |            |            |            |
|---|------------|------------|------------|
| Container Type                          | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner             | 0.8        | 0.0        | 0.8        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Current Form Total</b>               | <b>1.5</b> | <b>0.0</b> | <b>1.5</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.2        | 0.0        | 1.2        |
| <b>Final Form Total</b>     | <b>1.2</b> | <b>0.0</b> | <b>1.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.13                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.06                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 6.89                                 |
| Cements                         | 1290.00                              |
| Inorganic Matrix                | 1292.08                              |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.04E+01                                   |
| Np-237  | 5.02E-04                                   |
| Pu-238  | 6.41E-01                                   |
| Pu-239  | 1.82E+01                                   |
| Pu-240  | 4.42E+00                                   |
| Pu-241  | 3.12E+01                                   |
| Pu-242  | 3.98E-03                                   |
| Pu-244  | 3.49E-09                                   |
| Th-229  | 9.84E-12                                   |
| Th-230  | 2.58E-09                                   |
| Th-232  | 9.37E-16                                   |
| U-233   | 1.85E-08                                   |
| U-234   | 3.31E-05                                   |
| U-235   | 3.06E-07                                   |
| U-236   | 2.23E-06                                   |
| U-238   | 1.02E-11                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D019, D021, F002,  
F003

## TRUCON Code(s)

126/226

## Waste Stream Description

Cemented Organics

Waste Stream ID: **LA-TA-55-41**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                     |                   |            |          |    |
|-------------|--|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Solidified Organics | Waste Matrix Code | S3200      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Cemented organics (mixed)                          | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |             |            |             |
|---|-------------|------------|-------------|
| Container Type                          | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner             | 10.8        | 0.0        | 10.8        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 9.7         | 0.0        | 9.7         |
| Other                                   | 0.3         | 0.0        | 0.3         |
| <b>Current Form Total</b>               | <b>20.8</b> | <b>0.0</b> | <b>20.8</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 17.1        | 0.0        | 17.1        |
| SWB Dir Ld w/ Liner         | 1.9         | 0.0        | 1.9         |
| <b>Final Form Total</b>     | <b>18.9</b> | <b>0.0</b> | <b>18.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 43.30                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 508.10                               |
| Inorganic Matrix                | 453.40                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 133.06                               |
| Packaging Material, Plastic     | 33.43                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.81E+01                                   |
| Np-237  | 4.32E-04                                   |
| Pu-238  | 1.04E+00                                   |
| Pu-239  | 1.93E+01                                   |
| Pu-240  | 4.68E+00                                   |
| Pu-241  | 3.56E+01                                   |
| Pu-242  | 1.96E-02                                   |
| Pu-244  | 1.83E-08                                   |
| Th-229  | 8.48E-12                                   |
| Th-230  | 4.19E-09                                   |
| Th-232  | 9.92E-16                                   |
| U-233   | 1.59E-08                                   |
| U-234   | 5.36E-05                                   |
| U-235   | 3.23E-07                                   |
| U-236   | 2.36E-06                                   |
| U-238   | 5.02E-11                                   |

## Haz. Waste No(s).

D006, D007, D008

## TRUCON Code(s)

126/226

## Waste Stream Description

Cemented Organics Solidified organic process solids and up to six liters of emulsified solvents and oils generated from facility and equipment operations and maintenance. This waste consists of process leached solids, filter cakes, or evaporator bottoms stabilized in Portland or gypsum cement.

Waste Stream ID: LA-TA-55-42

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Graphite   | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Current Form Total</b>   | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b>     | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 91.50                                |
| Aluminum-based Metals/Alloys    | 0.37                                 |
| Other Metals                    | 10.97                                |
| Other Inorganic Materials       | 59.34                                |
| Cellulosics                     | 7.57                                 |
| Rubber                          | 11.36                                |
| Plastics                        | 35.03                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.46                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.13E-01                                   |
| Np-237  | 5.59E-07                                   |
| Pu-238  | 3.61E+02                                   |
| Pu-239  | 2.33E-01                                   |
| Pu-240  | 1.18E-01                                   |
| Pu-241  | 5.42E+00                                   |
| Pu-242  | 9.60E-05                                   |
| Th-229  | 3.65E-15                                   |
| Th-230  | 5.91E-07                                   |
| Th-232  | 1.05E-17                                   |
| U-233   | 1.15E-11                                   |
| U-234   | 1.18E-02                                   |
| U-235   | 2.53E-09                                   |
| U-236   | 3.86E-08                                   |
| U-238   | 1.59E-13                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

115/215

## Waste Stream Description

PU238 Graphite

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **LA-TA-55-43**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                                  | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents                         | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Combustible/noncombustible debris containing Pu-238 (non-mixed) |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner       | 4.4         | 0.0        | 4.4         |
| SWB w/ 4 - 55-gal Drums w/ Liners | 9.5         | 0.0        | 9.5         |
| <b>Current Form Total</b>         | <b>13.8</b> | <b>0.0</b> | <b>13.8</b> |

| Final Form Volumes                |             |            |             |
|-----------------------------------|-------------|------------|-------------|
| Container Type                    | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner       | 4.4         | 0.0        | 4.4         |
| SWB w/ 4 - 55-gal Drums w/ Liners | 9.5         | 0.0        | 9.5         |
| <b>Final Form Total</b>           | <b>13.8</b> | <b>0.0</b> | <b>13.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 92.64                                |
| Aluminum-based Metals/Alloys    | 0.51                                 |
| Other Metals                    | 0.21                                 |
| Other Inorganic Materials       | 0.34                                 |
| Cellulosics                     | 20.17                                |
| Rubber                          | 0.62                                 |
| Plastics                        | 25.30                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.67                                 |
| Organic Matrix                  | 0.18                                 |
| Soils/gravel                    | 0.18                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 185.72                               |
| Packaging Material, Plastic     | 22.84                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.21E-01                                   |
| Am-243  | 1.42E-07                                   |
| Np-237  | 1.24E-06                                   |
| Pu-238  | 4.18E+01                                   |
| Pu-239  | 6.81E-01                                   |
| Pu-240  | 1.95E-01                                   |
| Pu-241  | 1.42E+00                                   |
| Pu-242  | 4.37E-05                                   |
| Th-229  | 9.47E-14                                   |
| Th-230  | 5.13E-07                                   |
| Th-232  | 1.08E-07                                   |
| U-233   | 9.26E-11                                   |
| U-234   | 3.87E-03                                   |
| U-235   | 2.23E-08                                   |
| U-236   | 1.45E-07                                   |
| U-238   | 1.65E-13                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

116/216, 125/225

## Waste Stream Description

Combustible/noncombustible debris including paper, rags, plastic, rubber, and plastic-based and cellulose-based waste generated during 238Pu activities. Plastic-based waste includes, but may not be limited to: tape, polyethylene and vinyl; gloves; plastic vials, polystyrene; tygon tubing; polyvinyl chloride plastic; Teflon products; plexiglass; and dry box gloves (unleaded neoprene base). Cellulosebased waste includes, but may not be limited to: rags, wood, paper, and cardboard; laboratory coats and overalls; booties and cotton gloves, and similar materials. The waste may also contain HEPA filters, noncombustible glass and metallic debris. Some of this waste was packaged in small metal cans before being placed in 55 Gallon drums.

Waste Stream ID: LA-TA-55-43.01-S

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                |                                       |                 |                   |            |          |    |
|-------------|--------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | N/A                            | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                            | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes      |                   |              |
|----------------------|-------------------|--------------|
| Container Type       | Ref. Waste Stream | Volume       |
| SWB Dir Ld w/o Liner | WP-LA-TA-55-43.01 | 190.9        |
| <b>Shipped Total</b> |                   | <b>190.9</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 45.68                                |
| Aluminum-based Metals/Alloys | 0.11                                 |
| Other Metals                 | 0.38                                 |
| Other Inorganic Materials    | 0.13                                 |
| Cellulosics                  | 1.22                                 |
| Rubber                       | 0.19                                 |
| Plastics                     | 8.86                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.70E-03                                   |
| Am-243  | 7.54E-08                                   |
| Np-237  | 2.03E-07                                   |
| Pu-238  | 2.80E+00                                   |
| Pu-239  | 2.44E-03                                   |
| Pu-240  | 4.00E-03                                   |
| Pu-241  | 2.86E-02                                   |
| Pu-242  | 2.79E-06                                   |
| Th-229  | 2.56E-15                                   |
| Th-230  | 1.50E-08                                   |
| Th-232  | 2.40E-08                                   |
| U-233   | 6.87E-12                                   |
| U-234   | 2.41E-04                                   |
| U-235   | 1.93E-11                                   |
| U-236   | 9.50E-10                                   |
| U-238   | 3.37E-15                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **LA-TA-55-44**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                              | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents                     | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Combustible/noncombustible debris containing Pu-238 (mixed) |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Current Form Total</b>   | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b>     | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 12.10                                |
| Aluminum-based Metals/Alloys    | 1.30                                 |
| Other Metals                    | 1.10                                 |
| Other Inorganic Materials       | 8.30                                 |
| Cellulosics                     | 9.60                                 |
| Rubber                          | 4.40                                 |
| Plastics                        | 17.70                                |
| Cements                         | 508.10                               |
| Inorganic Matrix                | 2.70                                 |
| Organic Matrix                  | 1.70                                 |
| Soils/gravel                    | 2.10                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.51E-02                                   |
| Np-237  | 1.69E-08                                   |
| Pu-238  | 3.70E-02                                   |
| Pu-239  | 7.58E-01                                   |
| Pu-240  | 2.11E-01                                   |
| Pu-241  | 3.55E+00                                   |
| Pu-242  | 3.02E-05                                   |
| Th-229  | 9.29E-18                                   |
| Th-230  | 7.71E-12                                   |
| Th-232  | 2.48E-18                                   |
| U-233   | 9.77E-14                                   |
| U-234   | 4.26E-07                                   |
| U-235   | 2.99E-09                                   |
| U-236   | 2.51E-08                                   |
| U-238   | 1.82E-14                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

125/225

## Waste Stream Description

Combustible/noncombustible debris: heat source fabrication, 238Pu from SRS. Combustible/noncombustible debris including paper, rags, plastic, rubber, and plastic-based and cellulose-based waste generated during 238Pu activities. Plastic-based waste includes, but may not be limited to: tape, polyethylene and vinyl; gloves; plastic vials, polystyrene; tygon tubing; polyvinyl chloride plastic; Teflon products; plexiglass; and dry box gloves (unleaded neoprene base). Cellulosebased waste includes, but may not be limited to: rags, wood, paper, and cardboard; laboratory coats and overalls; booties and cotton gloves, and similar materials. The waste may also contain noncombustible glass and metallic debris. Some of this waste was packaged in small metal cans before being placed in 55 Gallon drums. This waste stream may contain lead items, or items from process status code R8, PPD, TDC (which may be mixed waste items).



Waste Stream ID: **LA-TA-55-46**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | MIXED NONCOMBUSTIBLE DEBRIS WASTE                  |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>     | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 60.51                                |
| Aluminum-based Metals/Alloys    | 0.24                                 |
| Other Metals                    | 7.25                                 |
| Other Inorganic Materials       | 39.24                                |
| Cellulosics                     | 5.01                                 |
| Rubber                          | 7.51                                 |
| Plastics                        | 23.17                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.96                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.46E-04                                   |
| Np-237  | 1.76E-09                                   |
| Pu-238  | 3.48E-01                                   |
| Pu-239  | 2.44E-04                                   |
| Pu-240  | 1.25E-04                                   |
| Pu-241  | 3.49E-03                                   |
| Pu-242  | 1.00E-07                                   |
| Th-229  | 3.97E-17                                   |
| Th-230  | 1.97E-09                                   |
| Th-232  | 3.65E-20                                   |
| U-233   | 6.80E-14                                   |
| U-234   | 2.14E-05                                   |
| U-235   | 4.82E-12                                   |
| U-236   | 7.40E-11                                   |
| U-238   | 3.03E-16                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D010

## TRUCON Code(s)

125/225

## Waste Stream Description

MIXED NONCOMBUSTIBLE DEBRIS WASTE

Waste Stream ID: LA-TA-55-47

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | HEPA FILTERS                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner       | 0.2        | 0.0        | 0.2        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Current Form Total</b>         | <b>2.1</b> | <b>0.0</b> | <b>2.1</b> |

| Final Form Volumes                |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner       | 0.2        | 0.0        | 0.2        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>           | <b>2.1</b> | <b>0.0</b> | <b>2.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 30.07                                |
| Aluminum-based Metals/Alloys    | 0.12                                 |
| Other Metals                    | 3.60                                 |
| Other Inorganic Materials       | 19.50                                |
| Cellulosics                     | 2.49                                 |
| Rubber                          | 3.73                                 |
| Plastics                        | 11.51                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.48                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 203.14                               |
| Packaging Material, Plastic     | 18.35                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.47E-04                                   |
| Np-237  | 1.75E-09                                   |
| Pu-238  | 6.16E-02                                   |
| Pu-239  | 1.33E-02                                   |
| Pu-240  | 3.13E-03                                   |
| Pu-241  | 2.60E-02                                   |
| Pu-242  | 1.97E-07                                   |
| Th-229  | 1.08E-17                                   |
| Th-230  | 1.42E-10                                   |
| Th-232  | 3.88E-19                                   |
| U-233   | 3.45E-14                                   |
| U-234   | 2.39E-06                                   |
| U-235   | 1.71E-10                                   |
| U-236   | 1.21E-09                                   |
| U-238   | 3.86E-16                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

119/219, 125/225

## Waste Stream Description

HEPA FILTERS

Waste Stream ID: LA-TA-55-50

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                     |                   |            |          |    |
|-------------|---|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory          | Final Waste Form                      | Solidified Organics | Waste Matrix Code | S3200      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Solidified Organics                     | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner       | 1.0        | 0.0        | 1.0        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Current Form Total</b>         | <b>2.9</b> | <b>0.0</b> | <b>2.9</b> |

| Final Form Volumes                |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner       | 1.0        | 0.0        | 1.0        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>           | <b>2.9</b> | <b>0.0</b> | <b>2.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.01                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.01                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.76                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 142.23                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 182.60                               |
| Packaging Material, Plastic     | 23.65                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.05E-02                                   |
| Np-237  | 2.64E-08                                   |
| Pu-238  | 8.32E-01                                   |
| Pu-239  | 5.66E-02                                   |
| Pu-240  | 1.50E-02                                   |
| Pu-241  | 1.80E-01                                   |
| Pu-242  | 1.72E-06                                   |
| Th-229  | 1.31E-16                                   |
| Th-230  | 9.01E-10                                   |
| Th-232  | 8.91E-19                                   |
| U-233   | 4.83E-13                                   |
| U-234   | 2.20E-05                                   |
| U-235   | 5.02E-10                                   |
| U-236   | 4.01E-09                                   |
| U-238   | 2.34E-15                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

112/212

## Waste Stream Description

Solidified Organics

Waste Stream ID: **LA-TA-55-53**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory          | Final Waste Form      | Salt Waste      | Waste Matrix Code                     | S3140      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Pyrochemical salts from PF-4 (mixed)    |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 11.9        | 0.0        | 11.9        |
| <b>Current Form Total</b>   | <b>11.9</b> | <b>0.0</b> | <b>11.9</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 11.9        | 0.0        | 11.9        |
| <b>Final Form Total</b>     | <b>11.9</b> | <b>0.0</b> | <b>11.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.40                                 |
| Aluminum-based Metals/Alloys    | 0.18                                 |
| Other Metals                    | 0.21                                 |
| Other Inorganic Materials       | 3.72                                 |
| Cellulosics                     | 0.18                                 |
| Rubber                          | 0.18                                 |
| Plastics                        | 0.35                                 |
| Cements                         | 508.10                               |
| Inorganic Matrix                | 127.04                               |
| Organic Matrix                  | 162.88                               |
| Soils/gravel                    | 20.17                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.43E+00                                   |
| Np-237  | 5.94E-06                                   |
| Pu-238  | 8.19E-01                                   |
| Pu-239  | 2.57E+01                                   |
| Pu-240  | 6.35E+00                                   |
| Pu-241  | 7.31E+01                                   |
| Pu-242  | 4.62E-04                                   |
| Th-229  | 1.34E-14                                   |
| Th-230  | 3.88E-10                                   |
| Th-232  | 1.67E-16                                   |
| U-233   | 7.31E-11                                   |
| U-234   | 1.43E-05                                   |
| U-235   | 1.52E-07                                   |
| U-236   | 1.13E-06                                   |
| U-238   | 4.18E-13                                   |

## Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D021, D022, D035, D039, D040, F001, F002, F005, P120

## TRUCON Code(s)

124/224

## Waste Stream Description

Pyrochemical salt waste (homogeneous) consisting of used chloride salts from pyrochemical processes such as electrorefining, molten salt extraction, salt stripping, fluoride reduction, and direct oxide reduction. A small fraction of combustible waste, such as plastics (mainly packaging), may also be present in this waste stream.

Waste Stream ID: **LA-TA-55-54**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SALT, SLAG, AND CRUCIBLE ITEMS                     |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.0        | 0.0        | 1.0        |
| <b>Current Form Total</b>   | <b>1.0</b> | <b>0.0</b> | <b>1.0</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.0        | 0.0        | 1.0        |
| <b>Final Form Total</b>     | <b>1.0</b> | <b>0.0</b> | <b>1.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 78.60                                |
| Aluminum-based Metals/Alloys    | 0.32                                 |
| Other Metals                    | 9.42                                 |
| Other Inorganic Materials       | 50.97                                |
| Cellulosics                     | 6.50                                 |
| Rubber                          | 9.76                                 |
| Plastics                        | 30.09                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.25                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.55E+00                                   |
| Np-237  | 9.47E-06                                   |
| Pu-238  | 5.93E+00                                   |
| Pu-239  | 7.73E+00                                   |
| Pu-240  | 2.18E+00                                   |
| Pu-241  | 1.31E+01                                   |
| Pu-242  | 3.11E-04                                   |
| Th-229  | 3.17E-13                                   |
| Th-230  | 5.40E-08                                   |
| Th-232  | 9.97E-16                                   |
| U-233   | 4.44E-10                                   |
| U-234   | 4.65E-04                                   |
| U-235   | 1.91E-07                                   |
| U-236   | 1.61E-06                                   |
| U-238   | 1.17E-12                                   |

## Haz. Waste No(s).

D007, D008, D009

## TRUCON Code(s)

122/222, 125/225

## Waste Stream Description

SALT, SLAG, AND CRUCIBLE ITEMS

Waste Stream ID: **LA-TA-55-56**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                          | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste      | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Noncombustible and combustible debris waste (non-mixed) |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 7.5        | 0.0        | 7.5        |
| 55-gal POC - 12" w/ Liner   | 1.9        | 0.0        | 1.9        |
| <b>Current Form Total</b>   | <b>9.4</b> | <b>0.0</b> | <b>9.4</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 7.5        | 0.0        | 7.5        |
| 55-gal POC - 12" w/ Liner   | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>     | <b>9.4</b> | <b>0.0</b> | <b>9.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 240.80                               |
| Aluminum-based Metals/Alloys    | 0.20                                 |
| Other Metals                    | 0.90                                 |
| Other Inorganic Materials       | 9.30                                 |
| Cellulosics                     | 1.10                                 |
| Rubber                          | 0.20                                 |
| Plastics                        | 6.80                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.20                                 |
| Organic Matrix                  | 0.20                                 |
| Soils/gravel                    | 0.20                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 210.12                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 27.50                                |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.23E+00                                   |
| Am-243  | 1.29E-05                                   |
| Cs-137  | 4.12E-08                                   |
| Np-237  | 7.47E-05                                   |
| Pu-238  | 2.31E+00                                   |
| Pu-239  | 1.73E+01                                   |
| Pu-240  | 4.28E+00                                   |
| Pu-241  | 2.06E+01                                   |
| Pu-242  | 3.02E-04                                   |
| Sr-90   | 4.15E-08                                   |
| Th-229  | 6.50E-12                                   |
| Th-230  | 3.68E-08                                   |
| Th-232  | 1.66E-15                                   |
| U-233   | 6.37E-09                                   |
| U-234   | 2.58E-04                                   |
| U-235   | 5.38E-06                                   |
| U-236   | 2.92E-06                                   |
| U-238   | 3.39E-08                                   |

## Haz. Waste No(s).

D008, D040, F001

## TRUCON Code(s)

117/217, 125/225

## Waste Stream Description

SMALL TOOLS, SMALL EQUIPMENT, CANS, MOTORS, PUMPS, PROCESS EQUIP. GLOVEBOXES ETC. Noncombustible and combustible waste generated from facility and equipment operations and maintenance. This waste includes, but may not be limited to, small tools, small equipment, cans, motors, pumps, process equipment, gloveboxes, ventilation ductwork, metal-based HEPA filters, pipes, glass, graphite, slag and crucibles, salt, discarded lab ware, windows, and bottles. The waste stream may also contain a smaller fraction of combustible solids (e.g., paper, rags, plastic, rubber, leaded gloves) and a small fraction of homogeneous solids (e.g. leached solids, ash, hydroxide cakes, impure oxides).

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LA-TA-55-60

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                       | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Remediation/D&D Waste                                | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Metal debris waste from all wings of PF4 (non-mixed) |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |              |            |              |
|---------------------------|--------------|------------|--------------|
| Container Type            | Stored       | Proj.      | Total        |
| Box - Crate               | 62.4         | 0.0        | 62.4         |
| Box - FRP                 | 1.1          | 0.0        | 1.1          |
| Other                     | 60.6         | 0.0        | 60.6         |
| <b>Current Form Total</b> | <b>124.1</b> | <b>0.0</b> | <b>124.1</b> |

| Final Form Volumes      |              |            |              |
|-------------------------|--------------|------------|--------------|
| Container Type          | Stored       | Proj.      | Total        |
| SWB Dir Ld w/ Liner     | 128.5        | 0.0        | 128.5        |
| <b>Final Form Total</b> | <b>128.5</b> | <b>0.0</b> | <b>128.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 258.16                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 294.54                               |
| Other Inorganic Materials       | 6.80                                 |
| Cellulosics                     | 1.96                                 |
| Rubber                          | 0.03                                 |
| Plastics                        | 0.16                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 1.20                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.01E-02                                   |
| Np-237  | 2.90E-05                                   |
| Pu-238  | 7.71E-02                                   |
| Pu-239  | 9.90E-02                                   |
| Pu-240  | 3.42E-02                                   |
| Pu-241  | 4.87E-01                                   |
| Pu-242  | 3.14E-03                                   |
| Pu-244  | 2.97E-09                                   |
| Th-229  | 4.30E-12                                   |
| Th-230  | 8.28E-10                                   |
| Th-232  | 1.83E-17                                   |
| U-233   | 3.40E-09                                   |
| U-234   | 6.59E-06                                   |
| U-235   | 2.64E-09                                   |
| U-236   | 2.74E-08                                   |
| U-238   | 2.76E-09                                   |

## Haz. Waste No(s).

D008, D011

## TRUCON Code(s)

117/217

## Waste Stream Description

Noncombustible scrap items generated from facility and equipment decontamination and decommissioning. This waste includes small tools, cans, small equipment items, motors, pumps, and process equipment. A small fraction of combustible waste, such as plastics (mainly packaging) may also be present in this waste stream.

Waste Stream ID: LA-TA-55-61

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                    | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Remediation/D&D Waste                             | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Metal debris waste from all wings of PF-4 (mixed) |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |              |            |              |
|---------------------------|--------------|------------|--------------|
| Container Type            | Stored       | Proj.      | Total        |
| Box - Crate               | 120.1        | 0.0        | 120.1        |
| Box - FRP                 | 15.0         | 0.0        | 15.0         |
| Other                     | 61.2         | 0.0        | 61.2         |
| <b>Current Form Total</b> | <b>196.4</b> | <b>0.0</b> | <b>196.4</b> |

| Final Form Volumes      |              |            |              |
|-------------------------|--------------|------------|--------------|
| Container Type          | Stored       | Proj.      | Total        |
| SWB Dir Ld w/ Liner     | 198.5        | 0.0        | 198.5        |
| <b>Final Form Total</b> | <b>198.5</b> | <b>0.0</b> | <b>198.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 257.70                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 302.90                               |
| Other Inorganic Materials       | 6.80                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 1.20                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.96E-02                                   |
| Np-237  | 1.55E-07                                   |
| Pu-238  | 2.67E-01                                   |
| Pu-239  | 1.29E-01                                   |
| Pu-240  | 4.40E-02                                   |
| Pu-241  | 3.52E-01                                   |
| Pu-242  | 8.96E-05                                   |
| Pu-244  | 7.54E-11                                   |
| Th-229  | 4.23E-15                                   |
| Th-230  | 2.43E-09                                   |
| Th-232  | 2.02E-17                                   |
| U-233   | 6.49E-12                                   |
| U-234   | 2.09E-05                                   |
| U-235   | 3.17E-09                                   |
| U-236   | 3.26E-08                                   |
| U-238   | 3.38E-13                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

117/217

## Waste Stream Description

Metal waste generated from facility and equipment decontamination and decommissioning activities.. This waste includes small tools, cans, small equipment items, motors, pumps, and process equipment. This waste also includes gloveboxes and associated ducting, equipment, and construction debris associated with the removal of gloveboxes. A small fraction of combustible waste, such as plastics (mainly packaging), may also be present in this waste stream.



Waste Stream ID: LA-TA-55-62

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory   | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Remediation/D&D Waste  | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Combustible/noncombustible debris waste from all wings of PF-4 (mixed) |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Box - Crate               | 42.1        | 0.0        | 42.1        |
| <b>Current Form Total</b> | <b>42.1</b> | <b>0.0</b> | <b>42.1</b> |

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner     | 43.5        | 0.0        | 43.5        |
| <b>Final Form Total</b> | <b>43.5</b> | <b>0.0</b> | <b>43.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 272.60                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 30.30                                |
| Other Inorganic Materials       | 6.80                                 |
| Cellulosics                     | 64.00                                |
| Rubber                          | 1.10                                 |
| Plastics                        | 5.30                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 1.20                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.07E-03                                   |
| Np-237  | 4.14E-08                                   |
| Pu-238  | 2.67E-03                                   |
| Pu-239  | 2.26E-02                                   |
| Pu-240  | 1.08E-02                                   |
| Pu-241  | 9.94E-02                                   |
| Pu-242  | 3.60E-06                                   |
| Th-229  | 1.11E-15                                   |
| Th-230  | 2.65E-11                                   |
| Th-232  | 5.38E-18                                   |
| U-233   | 1.71E-12                                   |
| U-234   | 2.19E-07                                   |
| U-235   | 5.79E-10                                   |
| U-236   | 8.37E-09                                   |
| U-238   | 1.41E-14                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Combustible waste generated from facility and equipment decontamination and decommissioning activities. Combustible waste includes paper, rags, plastic, rubber, and plastic-based and cellulose-based waste. Noncombustible waste includes items such as small tools, cans, small equipment items, and broken glass.

Waste Stream ID: **LA-TA-55-63**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Filter          | Waste Matrix Code                     | S5410      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | HEPA filter debris from all wings of PF-4 (mixed)  |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| Box - Crate               | 3.2        | 0.0        | 3.2        |
| <b>Current Form Total</b> | <b>3.2</b> | <b>0.0</b> | <b>3.2</b> |

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| SWB Dir Ld w/ Liner     | 3.8        | 0.0        | 3.8        |
| <b>Final Form Total</b> | <b>3.8</b> | <b>0.0</b> | <b>3.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 272.60                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 30.30                                |
| Other Inorganic Materials       | 6.80                                 |
| Cellulosics                     | 64.00                                |
| Rubber                          | 1.10                                 |
| Plastics                        | 5.30                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 1.20                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.42E-03                                   |
| Np-237  | 1.67E-08                                   |
| Pu-238  | 1.55E-03                                   |
| Pu-239  | 6.16E-02                                   |
| Pu-240  | 1.44E-02                                   |
| Pu-241  | 8.34E-02                                   |
| Pu-242  | 8.33E-07                                   |
| Th-229  | 2.56E-16                                   |
| Th-230  | 8.79E-12                                   |
| Th-232  | 4.22E-18                                   |
| U-233   | 5.22E-13                                   |
| U-234   | 9.52E-08                                   |
| U-235   | 1.22E-09                                   |
| U-236   | 8.55E-09                                   |
| U-238   | 2.51E-15                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

119/219

## Waste Stream Description

HEPA filters generated from facility and equipment operations and maintenance

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **LB-T001**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                              |                       |                 |                                       |            |          |    |
|-------------|------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Lawrence Berkeley Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste     | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | LBL-Waste                    |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| 12.2-gal Drum             | 0.1        | 0.0        | 0.1        |
| <b>Current Form Total</b> | <b>0.1</b> | <b>0.0</b> | <b>0.1</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.2        | 0.4        |
| <b>Final Form Total</b>     | <b>0.2</b> | <b>0.2</b> | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 11.10                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 3.09                                 |
| Other Inorganic Materials       | 1.35                                 |
| Cellulosics                     | 1.52                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 2.09                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.97E-02                                   |
| Am-243  | 4.50E-04                                   |
| Np-237  | 1.60E-04                                   |
| Pu-238  | 1.06E-04                                   |
| Pu-239  | 1.90E-03                                   |
| Pu-240  | 4.70E-04                                   |
| Pu-241  | 1.89E-04                                   |
| Pu-242  | 4.10E-05                                   |
| Pu-244  | 1.80E-13                                   |
| Th-229  | 1.36E-06                                   |
| Th-230  | 1.50E-12                                   |
| Th-232  | 5.00E-09                                   |
| U-233   | 2.90E-03                                   |
| U-234   | 6.69E-08                                   |
| U-235   | 1.90E-08                                   |
| U-236   | 6.97E-11                                   |
| U-238   | 4.70E-03                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Heterogeneous transuranic, non mixed waste

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **BLCHDN.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                   |            |                                       |      |
|-------------|--|-----------------------|-----------------|-------------------|------------|---------------------------------------|------|
| Site        | Lawrence Livermore National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5440      | Handling                              | CH   |
| Source Cat. | N/A                                    | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006 | Activity Concentrations Decayed to CY | 2006 |
| Stream Name | N/A                                    |                       |                 |                   |            |                                       |      |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |            |
|------------------------------|-------------------|------------|
| Container Type               | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner  | WP-BLCHDN.001     | 0.2        |
| 55-gal Drum Dir Ld w/o Liner | WP-BLCHDN.001     | 1.5        |
| <b>Shipped Total</b>         |                   | <b>1.7</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 61.42                                |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 13.70                                |
| Cellulosics                  | 5.41                                 |
| Rubber                       | 1.80                                 |
| Plastics                     | 40.99                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 11.12                                |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.58E-02                                   |
| Am-243  | 1.34E-03                                   |
| Cm-244  | 1.22E-01                                   |
| Np-237  | 5.38E-04                                   |
| Pu-238  | 5.28E-02                                   |
| Pu-239  | 2.19E-07                                   |
| Pu-240  | 2.69E-05                                   |
| Pu-241  | 1.47E-05                                   |
| Th-229  | 4.40E-13                                   |
| Th-230  | 2.73E-12                                   |
| Th-232  | 2.68E-23                                   |
| U-233   | 4.69E-09                                   |
| U-234   | 3.02E-07                                   |
| U-235   | 2.17E-16                                   |
| U-236   | 8.07E-13                                   |

## Haz. Waste No(s).

F005

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: LL-M001

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Lawrence Livermore National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste               | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | R&D Glovebox Waste (Form 1)            |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |             |             |             |
|-----------------------------------|-------------|-------------|-------------|
| Container Type                    | Stored      | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner       | 17.5        | 15.8        | 33.3        |
| 55-gal Drum Dir Ld w/o Liner      | 19.6        | 19.8        | 39.3        |
| 55-gal POC - 12" w/o Liner        | 2.7         | 4.0         | 6.7         |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9         | 0.0         | 1.9         |
| <b>Current Form Total</b>         | <b>41.6</b> | <b>39.5</b> | <b>81.1</b> |

| Final Form Volumes           |             |             |             |
|------------------------------|-------------|-------------|-------------|
| Container Type               | Stored      | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner  | 17.5        | 15.8        | 33.3        |
| 55-gal Drum Dir Ld w/o Liner | 20.4        | 19.8        | 40.1        |
| 55-gal POC - 12" w/o Liner   | 2.7         | 4.0         | 6.7         |
| <b>Final Form Total</b>      | <b>40.6</b> | <b>39.5</b> | <b>80.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 5.00                                 |
| Aluminum-based Metals/Alloys    | 5.00                                 |
| Other Metals                    | 2.00                                 |
| Other Inorganic Materials       | 1.00                                 |
| Cellulosics                     | 100.00                               |
| Rubber                          | 5.00                                 |
| Plastics                        | 100.00                               |
| Cements                         | 70.00                                |
| Inorganic Matrix                | 5.00                                 |
| Organic Matrix                  | 5.00                                 |
| Soils/gravel                    | 1.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 163.76                               |
| Packaging Material, Plastic     | 15.38                                |
| Packaging Material, Cellulosics | 11.43                                |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.68E+00                                   |
| Am-243  | 8.57E-04                                   |
| Cm-244  | 2.95E+00                                   |
| Cs-137  | 1.95E-03                                   |
| Np-237  | 4.84E-05                                   |
| Pu-238  | 1.70E+00                                   |
| Pu-239  | 1.48E+00                                   |
| Pu-240  | 5.50E-01                                   |
| Pu-241  | 6.90E+00                                   |
| Pu-242  | 2.98E-04                                   |
| Sr-90   | 2.84E-08                                   |
| Th-229  | 3.62E-06                                   |
| Th-230  | 8.41E-07                                   |
| Th-232  | 1.46E-08                                   |
| U-233   | 1.10E-03                                   |
| U-234   | 2.88E-05                                   |
| U-235   | 2.09E-06                                   |
| U-238   | 6.23E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D035, D040, F001, F002, F005

## TRUCON Code(s)

116/216

## Waste Stream Description

Specific waste items in this waste stream may include paper cartons, cardboard, Kimwipes, cotton swabs, tissues, cheesecloth, grinding paper, plastic (e.g., bags, sheet, tape, containers, pipette tips, and glovebox windows), Neoprene and Hypalon gloves (leaded and non-leaded), aluminum foil, tin cans, hardware (e.g., nuts, bolts, washers, fittings, gauges, fixtures, thermocouples), metal tools (e.g., screwdrivers and pliers), metal parts, equipment (with or without circuit boards), copper (wire, tubing, flanges, rods, and molds), sealed sources, aerosol cans, glass (e.g., beakers, vials, and ion exchange columns with resin), graphite molds, crucibles (magnesium oxide, tantalum), epoxy resin chunks, lead metal (e.g., bricks, foil), Kaufman cans (lead seams), lead-lined and cadmium-lined steel cans, mercury batteries, fluorescent and incandescent light bulbs, and small quantities of pyrochemical salts and solidified aqueous or organic liquids (individual drums contain less than 50 percent, by volume, solidified liquids, and/or salts).

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LL-M001-S5400-S

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                   |                                       |          |    |
|-------------|--|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Lawrence Livermore National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | N/A                                    | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                    |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                   |                   |              |
|-----------------------------------|-------------------|--------------|
| Container Type                    | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner       | WP-LL-M001-S5400  | 136.4        |
| 55-gal Drum Dir Ld w/o Liner      | WP-LL-M001-S5400  | 2.9          |
| SWB w/ 4 - 55-gal Drums w/ Liners | WP-LL-M001-S5400  | 3.8          |
| <b>Shipped Total</b>              |                   | <b>143.1</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 88.62                                |
| Aluminum-based Metals/Alloys | 2.36                                 |
| Other Metals                 | 3.76                                 |
| Other Inorganic Materials    | 7.07                                 |
| Cellulosics                  | 5.01                                 |
| Rubber                       | 11.09                                |
| Plastics                     | 57.87                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 14.54                                |
| Organic Matrix               | 3.08                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.03E+00                                   |
| Am-243  | 9.47E-05                                   |
| Cm-244  | 2.21E-01                                   |
| Cs-137  | 1.47E-07                                   |
| Np-237  | 5.10E-04                                   |
| Pu-238  | 2.51E+00                                   |
| Pu-239  | 4.18E+00                                   |
| Pu-240  | 1.17E+00                                   |
| Pu-241  | 1.51E+01                                   |
| Pu-242  | 2.21E-04                                   |
| Sr-90   | 1.45E-07                                   |
| Th-229  | 4.16E-13                                   |
| Th-230  | 2.48E-09                                   |
| Th-232  | 3.44E-18                                   |
| U-233   | 4.44E-09                                   |
| U-234   | 1.45E-04                                   |
| U-235   | 3.47E-06                                   |
| U-236   | 6.97E-08                                   |
| U-238   | 2.47E-05                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D035, D040, F001, F002, F005

## TRUCON Code(s)

116/216

## Waste Stream Description

N/A

Waste Stream ID: LL-T004

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Lawrence Livermore National Laboratory | Final Waste Form      | Salt Waste      | Waste Matrix Code                     | S3141      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste               | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Pyrochemical salt waste (Form 4)       |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 1.2        | 0.0        | 1.2        |
| <b>Current Form Total</b>    | <b>1.2</b> | <b>0.0</b> | <b>1.2</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 1.2        | 0.0        | 1.2        |
| <b>Final Form Total</b>      | <b>1.2</b> | <b>0.0</b> | <b>1.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 20.00                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 290.00                               |
| Cellulosics                     | 2.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 20.00                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.52E+01                                   |
| Cm-244  | 1.45E-03                                   |
| Np-237  | 5.75E-05                                   |
| Pu-238  | 1.24E+00                                   |
| Pu-239  | 3.16E+00                                   |
| Pu-240  | 1.54E+00                                   |
| Pu-241  | 2.08E+01                                   |
| Pu-242  | 9.60E-04                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

124/224

## Waste Stream Description

The waste consists primarily of used chloride and fluoride salts from pyrochemical processes such as electrorefining, molten salt extraction, and direct oxide reduction. There may also be up to 20% heterogeneous organic glovebox bagout waste packaged with the salt waste. This waste does not contain any RCRA listed hazardous materials.

Waste Stream ID: LL-W018a

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Lawrence Livermore National Laboratory             | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5100      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste                           | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Combined metal scrap & incidental combust.(Form 3) |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |              |             |              |
|---------------------------|--------------|-------------|--------------|
| Container Type            | Stored       | Proj.       | Total        |
| Box - Misc                | 2.6          | 0.0         | 2.6          |
| Box - Misc                | 3.6          | 0.0         | 3.6          |
| Box - Misc                | 3.8          | 0.0         | 3.8          |
| Box - Misc                | 3.9          | 0.0         | 3.9          |
| Box - Misc                | 4.8          | 0.0         | 4.8          |
| Box - Misc                | 4.9          | 0.0         | 4.9          |
| Box - Misc                | 5.5          | 0.0         | 5.5          |
| Box - Misc                | 6.4          | 0.0         | 6.4          |
| Box - Misc                | 6.5          | 0.0         | 6.5          |
| Box - Misc                | 7.1          | 0.0         | 7.1          |
| Box - Misc                | 7.1          | 0.0         | 7.1          |
| Box - Misc                | 11.8         | 0.0         | 11.8         |
| Box - Misc                | 86.9         | 0.0         | 86.9         |
| SWB Dir Ld w/o Liner      | 15.1         | 47.3        | 62.4         |
| <b>Current Form Total</b> | <b>169.9</b> | <b>47.3</b> | <b>217.1</b> |

| Final Form Volumes        |              |             |              |
|---------------------------|--------------|-------------|--------------|
| Container Type            | Stored       | Proj.       | Total        |
| SLB2 (5' x 5' x 8) Dir Ld | 209.4        | 0.0         | 209.4        |
| SWB Dir Ld w/o Liner      | 15.1         | 47.3        | 62.4         |
| <b>Final Form Total</b>   | <b>224.5</b> | <b>47.3</b> | <b>271.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 150.00                               |
| Aluminum-based Metals/Alloys    | 20.00                                |
| Other Metals                    | 10.00                                |
| Other Inorganic Materials       | 5.00                                 |
| Cellulosics                     | 5.00                                 |
| Rubber                          | 2.00                                 |
| Plastics                        | 20.00                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 2.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 201.89                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.75E+01                                   |
| Am-243  | 2.30E-06                                   |
| Cm-244  | 2.01E-04                                   |
| Cs-137  | 3.54E-03                                   |
| Np-237  | 1.55E-06                                   |
| Pu-238  | 2.90E+00                                   |
| Pu-239  | 1.34E-01                                   |
| Pu-240  | 7.12E-04                                   |
| Pu-241  | 1.05E-01                                   |
| Pu-242  | 3.36E-08                                   |
| Sr-90   | 1.11E-02                                   |
| U-233   | 1.10E-03                                   |
| U-234   | 2.88E-05                                   |
| U-235   | 9.47E-08                                   |
| U-238   | 6.23E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D035, D040, F001, F002, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

This waste stream is composed primarily of objects which, because of physical size, cannot be packaged in a 55-gallon drum. Typical objects include decommissioned gloveboxes, hoods, and large pieces of equipment (lathes, mills, etc.). This waste stream may contain lead metal (e.g., bricks, foil), Kaufman cans (lead seams), lead-lined and cadmium-lined steel cans, mercury batteries, fluorescent and incandescent light bulbs. The void space in boxes may be filled with other TRU waste items or with foam in plastic bags.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.



Waste Stream ID: LL-W018b

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Lawrence Livermore National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste               | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Sealed Sources                         | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 4.2        | 4.0        | 8.1        |
| <b>Current Form Total</b>    | <b>4.2</b> | <b>4.0</b> | <b>8.1</b> |

| Final Form Volumes        |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| 55-gal POC - 12" w/ Liner | 4.2        | 4.0        | 8.1        |
| <b>Final Form Total</b>   | <b>4.2</b> | <b>4.0</b> | <b>8.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 6.20                                 |
| Aluminum-based Metals/Alloys    | 1.30                                 |
| Other Metals                    | 250.00                               |
| Other Inorganic Materials       | 10.00                                |
| Cellulosics                     | 1.40                                 |
| Rubber                          | 2.90                                 |
| Plastics                        | 2.90                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 34.10                                |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 527.40                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 137.50                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.56E-02                                   |
| Cm-244  | 4.10E-05                                   |
| Np-237  | 2.36E-09                                   |
| Pu-238  | 3.79E-03                                   |
| Pu-239  | 4.05E-02                                   |
| Pu-240  | 1.21E-02                                   |
| Pu-241  | 3.57E-01                                   |
| Pu-242  | 2.58E-06                                   |
| U-235   | 3.88E-11                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

Specific waste items in this waste stream include sealed sources composed primarily of metal or metal encapsulated in a plastic or resin disk. Other waste items consist of packaging including cans, ice cream cartons, and plastic bags, sheet, and tape, bentonite clay or other inorganic absorbents such as Floor Dr

Waste Stream ID: LL-W019

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                     |                                       |            |          |    |
|-------------|--|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Lawrence Livermore National Laboratory | Final Waste Form      | Solidified Organics | Waste Matrix Code                     | S3900      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste               | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Solidified Waste (Form 2)              |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 15.8        | 0.0        | 15.8        |
| <b>Current Form Total</b>    | <b>15.8</b> | <b>0.0</b> | <b>15.8</b> |

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 15.8        | 0.0        | 15.8        |
| <b>Final Form Total</b>      | <b>15.8</b> | <b>0.0</b> | <b>15.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 30.00                                |
| Aluminum-based Metals/Alloys    | 5.00                                 |
| Other Metals                    | 1.00                                 |
| Other Inorganic Materials       | 1.00                                 |
| Cellulosics                     | 10.00                                |
| Rubber                          | 1.00                                 |
| Plastics                        | 20.00                                |
| Cements                         | 205.00                               |
| Inorganic Matrix                | 100.00                               |
| Organic Matrix                  | 100.00                               |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.99E+00                                   |
| Am-243  | 1.42E-07                                   |
| Cm-244  | 1.08E-03                                   |
| Cs-137  | 1.82E-06                                   |
| Np-237  | 8.68E-05                                   |
| Pu-238  | 1.37E+00                                   |
| Pu-239  | 4.11E+00                                   |
| Pu-240  | 1.17E+00                                   |
| Pu-241  | 1.78E+01                                   |
| Pu-242  | 2.37E-04                                   |
| Sr-90   | 1.82E-06                                   |
| U-233   | 6.64E-02                                   |
| U-234   | 9.96E-06                                   |
| U-235   | 3.75E-05                                   |
| U-238   | 7.46E-05                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D035, D040, F001, F002, F005

## TRUCON Code(s)

113/213

## Waste Stream Description

This waste stream consists of drums with 50 percent or greater by volume solidified aqueous or organic liquids. Additional waste in each container includes glovebox trash.

Waste Stream ID: MC-W001

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                     |                                       |                 |                   |            |          |    |
|-------------|-------------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | U.S. Army Materiel Command          | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5110      | Handling | CH |
| Source Cat. | Discarding Excess/Expired Materials | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | USAMC TRU Waste                     | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| 30-gal Drum               | 0.1        | 0.0        | 0.1        |
| <b>Current Form Total</b> | <b>0.1</b> | <b>0.0</b> | <b>0.1</b> |

| Final Form Volumes             |            |            |            |
|--------------------------------|------------|------------|------------|
| Container Type                 | Stored     | Proj.      | Total      |
| 55-gal S300 POC - 12" w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>        | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 190.00                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 527.40                               |
| Packaging Material, Plastic     | 226.90                               |
| Packaging Material, Cellulosics | 137.50                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Np-237  | 1.90E-04                                   |
| Pu-239  | 2.43E-02                                   |
| Th-229  | 2.82E-11                                   |
| U-233   | 2.23E-08                                   |
| U-235   | 6.47E-10                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

120/220

## Waste Stream Description

Army sealed sources

Waste Stream ID: **NT-JAS-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Nevada Test Site                                 | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste                         | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Combined metal scrap and incidental combustibles |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |              |              |
|---------------------------|-------------|--------------|--------------|
| Container Type            | Stored      | Proj.        | Total        |
| SWB Dir Ld w/ Liner       | 20.8        | 362.9        | 383.7        |
| <b>Current Form Total</b> | <b>20.8</b> | <b>362.9</b> | <b>383.7</b> |

| Final Form Volumes      |             |              |              |
|-------------------------|-------------|--------------|--------------|
| Container Type          | Stored      | Proj.        | Total        |
| SWB Dir Ld w/ Liner     | 20.8        | 362.9        | 383.7        |
| <b>Final Form Total</b> | <b>20.8</b> | <b>362.9</b> | <b>383.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 20.00                                |
| Aluminum-based Metals/Alloys    | 3.00                                 |
| Other Metals                    | 1.00                                 |
| Other Inorganic Materials       | 1.00                                 |
| Cellulosics                     | 1.00                                 |
| Rubber                          | 1.00                                 |
| Plastics                        | 1.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 1.20                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.45E-01                                   |
| Np-237  | 1.36E-07                                   |
| Pu-238  | 6.86E-02                                   |
| Pu-239  | 9.92E-02                                   |
| Pu-240  | 8.02E-02                                   |
| Pu-241  | 2.12E+00                                   |
| Th-229  | 8.21E-17                                   |
| Th-230  | 8.00E-12                                   |
| Th-232  | 5.28E-19                                   |
| U-233   | 8.81E-13                                   |
| U-234   | 5.91E-07                                   |
| U-235   | 2.93E-10                                   |
| U-236   | 7.14E-09                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

Waste stream consists of spent Primary Target Chambers from Jasper gas gun experiments. PTCs are metal chambers used to contain debris from the impact of a sabot on a disk of plutonium metal.

Waste Stream ID: **NTLBL-S5400-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                  |                       |                 |                   |                                       |          |    |
|-------------|------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Nevada Test Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | N/A              | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A              |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |            |
|------------------------------|-------------------|------------|
| Container Type               | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner  | WP-NTLBL-S5400    | 1.2        |
| 55-gal Drum Dir Ld w/o Liner | WP-NTLBL-S5400    | 0.4        |
| <b>Shipped Total</b>         |                   | <b>1.7</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 68.85                                |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 19.04                                |
| Other Inorganic Materials    | 35.81                                |
| Cellulosics                  | 8.37                                 |
| Rubber                       | 4.61                                 |
| Plastics                     | 18.87                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 1.74                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.29E-01                                   |
| Am-243  | 3.49E-03                                   |
| Cm-244  | 5.60E-01                                   |
| Cs-137  | 3.18E-05                                   |
| Np-237  | 4.06E-04                                   |
| Pu-238  | 8.86E-02                                   |
| Pu-239  | 4.04E-01                                   |
| Pu-240  | 9.15E-02                                   |
| Pu-241  | 2.12E+00                                   |
| Pu-242  | 1.27E-05                                   |
| Sr-90   | 3.18E-05                                   |
| Th-229  | 8.30E-14                                   |
| Th-230  | 1.14E-12                                   |
| Th-232  | 6.70E-20                                   |
| U-233   | 1.77E-09                                   |
| U-234   | 2.52E-07                                   |
| U-235   | 3.99E-10                                   |
| U-236   | 2.71E-09                                   |
| U-238   | 1.92E-15                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, F001, F002, F003, F005

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **NTLRC-S5400-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                  |                       |                 |                   |                                       |          |    |
|-------------|------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Nevada Test Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | N/A              | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A              |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |            |
|-----------------------------|-------------------|------------|
| Container Type              | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner | WP-NTLRC-S5400    | 3.1        |
| <b>Shipped Total</b>        |                   | <b>3.1</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 48.02                                |
| Aluminum-based Metals/Alloys | 10.80                                |
| Other Metals                 | 9.85                                 |
| Other Inorganic Materials    | 18.63                                |
| Cellulosics                  | 26.85                                |
| Rubber                       | 31.38                                |
| Plastics                     | 73.04                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 9.45                                 |
| Organic Matrix               | 0.57                                 |
| Soils/gravel                 | 0.17                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.52E+00                                   |
| Am-243  | 1.13E-05                                   |
| Cs-137  | 3.68E-07                                   |
| Np-237  | 7.83E-05                                   |
| Pu-238  | 1.86E-01                                   |
| Pu-239  | 2.31E+00                                   |
| Pu-240  | 8.47E-01                                   |
| Pu-241  | 1.12E+01                                   |
| Pu-242  | 9.39E-05                                   |
| Sr-90   | 3.67E-07                                   |
| Th-229  | 1.59E-14                                   |
| Th-230  | 1.28E-08                                   |
| Th-232  | 6.20E-19                                   |
| U-233   | 3.40E-10                                   |
| U-234   | 1.42E-03                                   |
| U-235   | 4.74E-05                                   |
| U-236   | 2.51E-08                                   |
| U-238   | 3.37E-05                                   |

## Haz. Waste No(s).

D005, D008, D009,  
D011, D019, D035,  
D040, F001, F005

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **NT-RF-BERYLLIUM-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                  |                                       |                     |                   |            |          |    |
|-------------|------------------|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Nevada Test Site | Final Waste Form                      | Uncategorized Metal | Waste Matrix Code | S5111      | Handling | CH |
| Source Cat. | N/A              | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A              | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                    |             |
|-----------------------------|--------------------|-------------|
| Container Type              | Ref. Waste Stream  | Volume      |
| 55-gal Drum Dir Ld w/ Liner | WP-NT-RF-BERYLLIUM | 29.3        |
| <b>Shipped Total</b>        |                    | <b>29.3</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 3.88                                 |
| Aluminum-based Metals/Alloys | 4.01                                 |
| Other Metals                 | 158.30                               |
| Other Inorganic Materials    | 1.17                                 |
| Cellulosics                  | 8.92                                 |
| Rubber                       | 0.09                                 |
| Plastics                     | 15.77                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.29E-01                                   |
| Am-243  | 3.13E-08                                   |
| Np-237  | 1.35E-06                                   |
| Pu-238  | 3.26E-02                                   |
| Pu-239  | 8.28E-01                                   |
| Pu-240  | 1.88E-01                                   |
| Pu-241  | 1.54E+00                                   |
| Pu-242  | 1.47E-05                                   |
| Th-229  | 1.90E-08                                   |
| Th-230  | 2.77E-10                                   |
| Th-232  | 1.38E-19                                   |
| U-233   | 2.03E-04                                   |
| U-234   | 3.08E-05                                   |
| U-235   | 6.11E-07                                   |
| U-236   | 5.57E-09                                   |
| U-238   | 7.89E-06                                   |

## Haz. Waste No(s).

D007, F002

## TRUCON Code(s)

125/225, 133/233

## Waste Stream Description

N/A

Waste Stream ID: NT-RF-GRAPHITE-S

## Appendix A

## TRU Waste Inventory Profile Report

|             |                  |                       |                 |                   |                                       |          |    |
|-------------|------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Nevada Test Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5126                                 | Handling | CH |
| Source Cat. | N/A              | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A              |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |            |
|-----------------------------|-------------------|------------|
| Container Type              | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner | WP-NT-RF-GRAPHITE | 3.7        |
| <b>Shipped Total</b>        |                   | <b>3.7</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.32                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 291.08                               |
| Cellulosics                  | 2.30                                 |
| Rubber                       | 0.61                                 |
| Plastics                     | 12.55                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.72E-01                                   |
| Np-237  | 8.36E-06                                   |
| Pu-238  | 3.22E-01                                   |
| Pu-239  | 1.04E+01                                   |
| Pu-240  | 1.92E+00                                   |
| Pu-241  | 1.81E+01                                   |
| Pu-242  | 1.40E-04                                   |
| Th-229  | 1.67E-15                                   |
| Th-230  | 1.41E-10                                   |
| Th-232  | 1.41E-18                                   |
| U-233   | 3.58E-11                                   |
| U-234   | 1.61E-05                                   |
| U-235   | 1.02E-08                                   |
| U-236   | 5.71E-08                                   |
| U-238   | 7.58E-06                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

115/215, 125/225

## Waste Stream Description

N/A



Waste Stream ID: NT-RF-METAL-S

## Appendix A

## TRU Waste Inventory Profile Report

|             |                  |                       |                     |                   |                                       |          |    |
|-------------|------------------|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Nevada Test Site | Final Waste Form      | Uncategorized Metal | Waste Matrix Code | S5111                                 | Handling | CH |
| Source Cat. | N/A              | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A              |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |            |
|------------------------------|-------------------|------------|
| Container Type               | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner  | WP-NT-RF-METAL    | 5.6        |
| 55-gal Drum Dir Ld w/o Liner | WP-NT-RF-METAL    | 0.4        |
| <b>Shipped Total</b>         |                   | <b>6.0</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 166.64                               |
| Aluminum-based Metals/Alloys | 25.59                                |
| Other Metals                 | 4.59                                 |
| Other Inorganic Materials    | 0.24                                 |
| Cellulosics                  | 7.26                                 |
| Rubber                       | 0.65                                 |
| Plastics                     | 21.28                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.12E-01                                   |
| Am-243  | 4.51E-07                                   |
| Np-237  | 1.86E-06                                   |
| Pu-238  | 3.56E-02                                   |
| Pu-239  | 1.12E+00                                   |
| Pu-240  | 2.77E-01                                   |
| Pu-241  | 2.65E+00                                   |
| Pu-242  | 2.24E-05                                   |
| Th-229  | 3.76E-16                                   |
| Th-230  | 6.65E-08                                   |
| Th-232  | 2.03E-19                                   |
| U-233   | 8.05E-12                                   |
| U-234   | 7.39E-03                                   |
| U-235   | 4.54E-06                                   |
| U-236   | 8.21E-09                                   |
| U-238   | 3.70E-03                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

117/217, 125/225

## Waste Stream Description

N/A

Waste Stream ID: NTS54332R0-S

## Appendix A

## TRU Waste Inventory Profile Report

|             |                  |                       |                 |                   |                                       |          |    |
|-------------|------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Nevada Test Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | N/A              | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A              |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                   |                   |              |
|-----------------------------------|-------------------|--------------|
| Container Type                    | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner       | WP-NTS54332R0     | 235.0        |
| 55-gal Drum Dir Ld w/o Liner      | WP-NTS54332R0     | 47.6         |
| SWB w/ 4 - 55-gal Drums w/ Liners | WP-NTS54332R0     | 24.6         |
| <b>Shipped Total</b>              |                   | <b>307.2</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 45.13                                |
| Aluminum-based Metals/Alloys | 2.90                                 |
| Other Metals                 | 3.84                                 |
| Other Inorganic Materials    | 6.28                                 |
| Cellulosics                  | 13.22                                |
| Rubber                       | 11.05                                |
| Plastics                     | 46.10                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 10.47                                |
| Organic Matrix               | 3.40                                 |
| Soils/gravel                 | 0.08                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.89E-01                                   |
| Am-243  | 4.23E-05                                   |
| Cm-244  | 9.95E-03                                   |
| Cs-137  | 7.92E-07                                   |
| Np-237  | 4.64E-05                                   |
| Pu-238  | 8.22E-02                                   |
| Pu-239  | 1.20E+00                                   |
| Pu-240  | 3.14E-01                                   |
| Pu-241  | 3.62E+00                                   |
| Pu-242  | 3.38E-05                                   |
| Sr-90   | 8.08E-07                                   |
| Th-229  | 1.33E-07                                   |
| Th-230  | 1.63E-09                                   |
| Th-232  | 9.21E-19                                   |
| U-233   | 7.08E-04                                   |
| U-234   | 9.08E-05                                   |
| U-235   | 3.25E-03                                   |
| U-236   | 1.86E-08                                   |
| U-238   | 3.29E-05                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D040, F001, F002, F003, F004, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: NTS54COMRO-S

## Appendix A

## TRU Waste Inventory Profile Report

|             |                  |                       |                 |                   |                                       |          |    |
|-------------|------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Nevada Test Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | N/A              | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A              |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                   |                   |             |
|-----------------------------------|-------------------|-------------|
| Container Type                    | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner       | WP-NTS54COMRO     | 39.5        |
| 55-gal Drum Dir Ld w/o Liner      | WP-NTS54COMRO     | 8.9         |
| SWB w/ 4 - 55-gal Drums w/ Liners | WP-NTS54COMRO     | 1.9         |
| <b>Shipped Total</b>              |                   | <b>50.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 50.86                                |
| Aluminum-based Metals/Alloys | 4.45                                 |
| Other Metals                 | 5.66                                 |
| Other Inorganic Materials    | 8.36                                 |
| Cellulosics                  | 20.52                                |
| Rubber                       | 12.84                                |
| Plastics                     | 55.40                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 3.71                                 |
| Organic Matrix               | 0.66                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.77E-01                                   |
| Am-243  | 4.16E-04                                   |
| Cm-244  | 5.10E-01                                   |
| Cs-137  | 1.68E-06                                   |
| Np-237  | 9.65E-05                                   |
| Pu-238  | 4.28E-01                                   |
| Pu-239  | 1.02E+00                                   |
| Pu-240  | 2.42E-01                                   |
| Pu-241  | 2.50E+00                                   |
| Pu-242  | 3.66E-05                                   |
| Sr-90   | 1.68E-06                                   |
| Th-229  | 9.73E-07                                   |
| Th-230  | 7.46E-10                                   |
| Th-232  | 7.10E-19                                   |
| U-233   | 5.19E-03                                   |
| U-234   | 4.27E-05                                   |
| U-235   | 2.62E-07                                   |
| U-236   | 1.44E-08                                   |
| U-238   | 1.75E-05                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D040, F001, F002, F003, F004, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: NTS54MIX1R0-S

## Appendix A

## TRU Waste Inventory Profile Report

|             |                  |                       |                 |                   |                                       |          |    |
|-------------|------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Nevada Test Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | N/A              | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A              |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |            |
|-----------------------------|-------------------|------------|
| Container Type              | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner | WP-NTS54MIX1R0    | 0.4        |
| <b>Shipped Total</b>        |                   | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 33.89                                |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 2.40                                 |
| Cellulosics                  | 38.46                                |
| Rubber                       | 41.59                                |
| Plastics                     | 38.46                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.14E-03                                   |
| Am-243  | 2.30E-04                                   |
| Cs-137  | 1.81E-04                                   |
| Np-237  | 1.90E-06                                   |
| Pu-238  | 9.76E-04                                   |
| Pu-239  | 6.96E-02                                   |
| Pu-240  | 1.67E-02                                   |
| Pu-241  | 5.70E-02                                   |
| Pu-242  | 1.64E-06                                   |
| Th-229  | 6.03E-15                                   |
| Th-230  | 2.03E-13                                   |
| Th-232  | 1.96E-19                                   |
| U-233   | 3.22E-11                                   |
| U-234   | 1.12E-08                                   |
| U-235   | 2.74E-10                                   |
| U-236   | 1.99E-09                                   |
| U-238   | 9.90E-16                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D040, F001, F002, F003, F004, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: NT-W001

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Nevada Test Site                        | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5490      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Heterogeneous Debris, Uncategorized     |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |              |            |              |
|---|--------------|------------|--------------|
| Container Type                          | Stored       | Proj.      | Total        |
| 110-gal Drum w/ 1 - 85-gal Drum         | 0.4          | 0.0        | 0.4          |
| 55-gal Drum Dir Ld w/ Liner             | 19.6         | 2.5        | 22.0         |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 1.6          | 0.0        | 1.6          |
| Box - Misc                              | 238.7        | 0.0        | 238.7        |
| <b>Current Form Total</b>               | <b>260.3</b> | <b>2.5</b> | <b>262.8</b> |

| Final Form Volumes                |              |            |              |
|-----------------------------------|--------------|------------|--------------|
| Container Type                    | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner       | 11.2         | 2.5        | 13.7         |
| SWB Dir Ld w/ Liner               | 241.9        | 0.0        | 241.9        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 18.9         | 0.0        | 18.9         |
| <b>Final Form Total</b>           | <b>272.1</b> | <b>2.5</b> | <b>274.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 72.20                                |
| Aluminum-based Metals/Alloys    | 12.30                                |
| Other Metals                    | 5.80                                 |
| Other Inorganic Materials       | 4.80                                 |
| Cellulosics                     | 52.50                                |
| Rubber                          | 3.80                                 |
| Plastics                        | 50.10                                |
| Cements                         | 30.00                                |
| Inorganic Matrix                | 11.80                                |
| Organic Matrix                  | 11.80                                |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 156.33                               |
| Packaging Material, Plastic     | 4.03                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.87E-01                                   |
| Am-243  | 1.99E-03                                   |
| Cm-244  | 3.16E-03                                   |
| Cs-137  | 4.11E-05                                   |
| Np-237  | 1.10E-05                                   |
| Pu-238  | 2.06E-01                                   |
| Pu-239  | 4.53E+00                                   |
| Pu-240  | 3.04E-02                                   |
| Pu-241  | 2.14E-01                                   |
| Pu-242  | 1.42E-04                                   |
| Pu-244  | 1.63E-09                                   |
| Sr-90   | 1.39E-07                                   |
| Th-229  | 5.50E-06                                   |
| Th-230  | 2.63E-09                                   |
| Th-232  | 8.91E-18                                   |
| U-233   | 2.93E-03                                   |
| U-234   | 2.08E-05                                   |
| U-235   | 2.60E-07                                   |
| U-236   | 1.80E-08                                   |
| U-238   | 2.51E-07                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D040, F001, F002, F003, F004, F005

## TRUCON Code(s)

111/211, 116/216, 125/225

## Waste Stream Description

This waste stream consists of glovebox parts, laboratory trash, contaminated equipment and solidified sludges. Real time radiography has been performed on the waste to verify that there are no free liquids present, with the exception of less than 1% by volume in the solidified sludge. The waste is contact-handled TRU waste. The waste stream was generated at the Lawrence Livermore National Laboratory, Livermore, CA (LLNL) and shipped to the NTS from 1974 until 1990. The waste was declared as potentially mixed TRU waste by the generator in April, 1991. There are currently 69 drums of solidified (portland or gypsum (envirostone) cement) inorganic sludge that have been identified via RTR.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: NT-W021

## Appendix A

## TRU Waste Inventory Profile Report

|             |                          |                                       |                 |                   |            |          |    |
|-------------|--------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Nevada Test Site         | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | V3XA Spheres             | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                 |            |            |            |
|--------------------------------------|------------|------------|------------|
| Container Type                       | Stored     | Proj.      | Total      |
| Sphere - 3-ft. dia HY80 Carbon Steel | 0.9        | 0.0        | 0.9        |
| <b>Current Form Total</b>            | <b>0.9</b> | <b>0.0</b> | <b>0.9</b> |

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| TDOP Dir Ld             | 9.6        | 0.0        | 9.6        |
| <b>Final Form Total</b> | <b>9.6</b> | <b>0.0</b> | <b>9.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 3140.00                              |
| Aluminum-based Metals/Alloys    | 6.60                                 |
| Other Metals                    | 10.30                                |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 10.10                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 15.00                                |
| Inorganic Matrix                | 548.00                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 161.00                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.46E-01                                   |
| Np-237  | 2.45E-06                                   |
| Pu-238  | 1.64E-01                                   |
| Pu-239  | 5.68E+00                                   |
| Pu-240  | 1.30E+00                                   |
| Pu-241  | 1.22E+01                                   |
| Pu-242  | 1.15E-04                                   |
| Th-229  | 3.75E-14                                   |
| Th-230  | 5.66E-07                                   |
| Th-232  | 3.82E-16                                   |
| U-233   | 7.63E-11                                   |
| U-234   | 3.15E-03                                   |
| U-235   | 6.02E-05                                   |
| U-236   | 7.72E-07                                   |
| U-238   | 3.10E-03                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

The two steel vessels are 1-inch thick by 3-foot diameter, weighing about 2700 lbs. each. The vessels contain heterogeneous mixtures of the following materials: Plutonium, D-38, Beryllium metal, Completely burned high explosive, Stainless steel, Brass, Polystyrene foam, Aluminum, Coke (degassed coal), Water absorbed by the coke, Steel, Glass, Epoxy resin, Thermalite (aerated cement block), Plaster, Hortag (fly-ash and clay), Wood, and Krypton-85 tracer gas for leak detection. The UK has had similar vessels in storage for over ten years, but none containing plutonium have ever been opened. Vessels containing D-38 only have been opened, with small amounts of water vapor and some loose debris found inside. The bulk of the materials were found to be trapped within the thick coke layer lining the inner surface of the vessel. No more wastes of this type are planned to be generated.

Waste Stream ID: **OR-W201**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Oak Ridge National Laboratory           | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | Source Unknown                          | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | CH-TRU Heterogeneous Solids - non-mixed |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |              |              |              |
|------------------------------|--------------|--------------|--------------|
| Container Type               | Stored       | Proj.        | Total        |
| 55-gal Drum Dir Ld w/o Liner | 205.5        | 167.2        | 372.7        |
| 85-gal Drum Dir Ld w/o Liner | 1.0          | 0.0          | 1.0          |
| Box - Misc                   | 1.3          | 0.0          | 1.3          |
| Box - Misc                   | 16.3         | 0.0          | 16.3         |
| Box - Misc                   | 132.6        | 0.0          | 132.6        |
| Box - Misc                   | 137.7        | 0.0          | 137.7        |
| <b>Current Form Total</b>    | <b>494.4</b> | <b>167.2</b> | <b>661.6</b> |

| Final Form Volumes           |              |              |              |
|------------------------------|--------------|--------------|--------------|
| Container Type               | Stored       | Proj.        | Total        |
| 55-gal Drum Dir Ld w/o Liner | 279.3        | 233.0        | 512.3        |
| <b>Final Form Total</b>      | <b>279.3</b> | <b>233.0</b> | <b>512.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 96.20                                |
| Aluminum-based Metals/Alloys    | 0.80                                 |
| Other Metals                    | 10.65                                |
| Other Inorganic Materials       | 2.40                                 |
| Cellulosics                     | 80.90                                |
| Rubber                          | 7.40                                 |
| Plastics                        | 64.90                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 1.50                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.16E+00                                   |
| Am-243  | 5.55E-04                                   |
| Cm-244  | 3.28E-01                                   |
| Cs-137  | 6.32E-03                                   |
| Np-237  | 1.79E-04                                   |
| Pu-238  | 3.42E+00                                   |
| Pu-239  | 1.43E+00                                   |
| Pu-240  | 1.95E+00                                   |
| Pu-241  | 7.72E+01                                   |
| Pu-242  | 9.78E-04                                   |
| Pu-244  | 3.62E-11                                   |
| Sr-90   | 3.37E-02                                   |
| Th-229  | 1.25E-04                                   |
| Th-230  | 5.29E-06                                   |
| Th-232  | 5.20E-07                                   |
| U-233   | 6.33E-02                                   |
| U-234   | 2.79E-02                                   |
| U-235   | 4.90E-06                                   |
| U-236   | 3.48E-04                                   |
| U-238   | 8.41E-05                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

CH-TRU debris from the FWENC facility. Alpha contaminated waste not meeting the definition of TRU will be segregated out from currently stored inventory during the treatment process and will be disposed of at NTS.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

A - OR - 1

Waste Stream ID: **OR-W202**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                     |                       |                 |                                       |            |          |    |
|-------------|-------------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Oak Ridge National Laboratory       | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | Other/Multiple Sources              | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | CH-TRU Heterogeneous Solids - mixed |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |              |             |              |
|------------------------------|--------------|-------------|--------------|
| Container Type               | Stored       | Proj.       | Total        |
| 110-gal Drum Dir Ld          | 2.9          | 0.0         | 2.9          |
| 55-gal Drum Dir Ld w/o Liner | 401.4        | 41.2        | 442.6        |
| 85-gal Drum Dir Ld w/o Liner | 141.4        | 0.0         | 141.4        |
| Box - Misc                   | 102.0        | 0.0         | 102.0        |
| <b>Current Form Total</b>    | <b>647.7</b> | <b>41.2</b> | <b>688.9</b> |

| Final Form Volumes           |              |             |              |
|------------------------------|--------------|-------------|--------------|
| Container Type               | Stored       | Proj.       | Total        |
| 55-gal Drum Dir Ld w/o Liner | 279.3        | 57.0        | 336.3        |
| <b>Final Form Total</b>      | <b>279.3</b> | <b>57.0</b> | <b>336.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 96.20                                |
| Aluminum-based Metals/Alloys    | 0.80                                 |
| Other Metals                    | 10.65                                |
| Other Inorganic Materials       | 2.40                                 |
| Cellulosics                     | 80.90                                |
| Rubber                          | 7.40                                 |
| Plastics                        | 64.90                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 1.50                                 |
| Soils/gravel                    | 319.00                               |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.77E-01                                   |
| Am-243  | 7.40E-03                                   |
| Cm-244  | 2.73E+00                                   |
| Cs-137  | 8.37E-04                                   |
| Np-237  | 1.26E-03                                   |
| Pu-238  | 2.95E+00                                   |
| Pu-239  | 2.94E-01                                   |
| Pu-240  | 2.72E-01                                   |
| Pu-241  | 9.96E-01                                   |
| Pu-242  | 2.90E-04                                   |
| Pu-244  | 1.71E-08                                   |
| Sr-90   | 2.07E-03                                   |
| Th-229  | 2.61E-04                                   |
| Th-230  | 7.55E-06                                   |
| Th-232  | 1.90E-06                                   |
| U-233   | 1.33E-01                                   |
| U-234   | 2.44E-04                                   |
| U-235   | 6.15E-06                                   |
| U-236   | 2.85E-07                                   |
| U-238   | 3.80E-05                                   |

## Haz. Waste No(s).

D006, D007, D008, D009, D011, D018, D022, F001, F002, F004, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

CH-TRU DEBRIS FROM THE FWENC FACILITY. INCLUDES WASTE CONTAINERS FROM NFS. MIXED WASTE TREATED TO LDR OR MACROENCAPSULATED.



Waste Stream ID: **OR-W203**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Oak Ridge National Laboratory           | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | Other/Multiple Sources                  | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | ORNL Newly Generated Debris - Post 2013 |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |            |             |             |
|------------------------------|------------|-------------|-------------|
| Container Type               | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/o Liner | 0.0        | 49.9        | 49.9        |
| <b>Current Form Total</b>    | <b>0.0</b> | <b>49.9</b> | <b>49.9</b> |

| Final Form Volumes           |            |             |             |
|------------------------------|------------|-------------|-------------|
| Container Type               | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/o Liner | 0.0        | 49.9        | 49.9        |
| <b>Final Form Total</b>      | <b>0.0</b> | <b>49.9</b> | <b>49.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 96.20                                |
| Aluminum-based Metals/Alloys    | 0.80                                 |
| Other Metals                    | 10.65                                |
| Other Inorganic Materials       | 2.40                                 |
| Cellulosics                     | 80.90                                |
| Rubber                          | 7.40                                 |
| Plastics                        | 64.90                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 1.50                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.03E-03                                   |
| Am-243  | 6.44E-04                                   |
| Cm-244  | 1.11E+00                                   |
| Cs-137  | 3.36E-02                                   |
| Pu-238  | 6.79E-03                                   |
| Pu-239  | 1.24E-04                                   |
| Pu-240  | 5.84E-03                                   |
| Pu-241  | 8.10E-02                                   |
| Pu-242  | 8.46E-05                                   |
| Sr-90   | 2.49E-01                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Hot Cell Debris Waste

Waste Stream ID: **OR-W204**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Oak Ridge National Laboratory                      | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | PCB contaminated CH-TRU debris                     |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 110-gal Drum Dir Ld          | 0.4         | 0.0        | 0.4         |
| 55-gal Drum Dir Ld w/o Liner | 2.7         | 0.0        | 2.7         |
| Box - Misc                   | 20.4        | 0.0        | 20.4        |
| <b>Current Form Total</b>    | <b>23.5</b> | <b>0.0</b> | <b>23.5</b> |

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 18.1        | 0.0        | 18.1        |
| <b>Final Form Total</b>      | <b>18.1</b> | <b>0.0</b> | <b>18.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 96.20                                |
| Aluminum-based Metals/Alloys    | 0.80                                 |
| Other Metals                    | 10.65                                |
| Other Inorganic Materials       | 2.40                                 |
| Cellulosics                     | 80.90                                |
| Rubber                          | 7.40                                 |
| Plastics                        | 64.90                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 1.50                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.07E-03                                   |
| Am-243  | 1.75E-05                                   |
| Cm-244  | 7.07E-02                                   |
| Cs-137  | 1.11E-02                                   |
| Np-237  | 5.55E-08                                   |
| Pu-238  | 1.14E-02                                   |
| Pu-239  | 8.64E-03                                   |
| Pu-240  | 5.43E-03                                   |
| Pu-241  | 2.22E-03                                   |
| Pu-242  | 3.72E-08                                   |
| Sr-90   | 1.38E-03                                   |
| Th-229  | 1.15E-05                                   |
| Th-230  | 1.57E-09                                   |
| Th-232  | 2.07E-18                                   |
| U-233   | 5.82E-03                                   |
| U-234   | 8.68E-06                                   |
| U-235   | 1.09E-06                                   |
| U-236   | 3.67E-09                                   |
| U-238   | 8.29E-06                                   |

## Haz. Waste No(s).

D004, D005, D006,  
D007, D008, D009,  
D010, D011, D022,  
F001, F002, F004,  
F005

## TRUCON Code(s)

125/225

## Waste Stream Description

PCB contamination 240ppm.

Waste Stream ID: **OR-W205**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                               |                                       |                 |                   |            |          |    |
|-------------|-------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Oak Ridge National Laboratory | Final Waste Form                      | Soils           | Waste Matrix Code | S4200      | Handling | CH |
| Source Cat. | Remediation/D&D Waste         | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | CH-NFS Soils                  | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |              |            |              |
|------------------------------|--------------|------------|--------------|
| Container Type               | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/o Liner | 101.7        | 0.0        | 101.7        |
| Box - Misc                   | 12.8         | 0.0        | 12.8         |
| <b>Current Form Total</b>    | <b>114.5</b> | <b>0.0</b> | <b>114.5</b> |

| Final Form Volumes           |              |            |              |
|------------------------------|--------------|------------|--------------|
| Container Type               | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/o Liner | 101.7        | 0.0        | 101.7        |
| <b>Final Form Total</b>      | <b>101.7</b> | <b>0.0</b> | <b>101.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 96.20                                |
| Aluminum-based Metals/Alloys    | 0.80                                 |
| Other Metals                    | 10.65                                |
| Other Inorganic Materials       | 2.40                                 |
| Cellulosics                     | 80.90                                |
| Rubber                          | 7.40                                 |
| Plastics                        | 64.90                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 1.50                                 |
| Soils/gravel                    | 1300.00                              |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.28E+00                                   |
| Np-237  | 7.91E-06                                   |
| Pu-238  | 2.16E-01                                   |
| Pu-239  | 2.82E+00                                   |
| Pu-240  | 1.25E+00                                   |
| Pu-241  | 5.67E+00                                   |
| Pu-242  | 9.60E-05                                   |
| Th-229  | 1.57E-07                                   |
| Th-230  | 1.08E-05                                   |
| Th-232  | 7.23E-08                                   |
| U-233   | 7.96E-05                                   |
| U-234   | 5.71E-02                                   |
| U-235   | 4.62E-06                                   |
| U-236   | 7.78E-07                                   |
| U-238   | 5.92E-05                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

Waste consists of non-mixed soils from NFS

Waste Stream ID: **OR-W211**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Oak Ridge National Laboratory           | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | RH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | RH TRU Heterogeneous Debris             |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |              |             |              |
|------------------------------|--------------|-------------|--------------|
| Container Type               | Stored       | Proj.       | Total        |
| 55-gal Drum Dir Ld w/o Liner | 0.6          | 0.0         | 0.6          |
| Cask - Misc                  | 360.2        | 19.9        | 380.1        |
| Cask - Misc                  | 15.2         | 0.0         | 15.2         |
| <b>Current Form Total</b>    | <b>376.0</b> | <b>19.9</b> | <b>395.9</b> |

| Final Form Volumes           |              |             |              |
|------------------------------|--------------|-------------|--------------|
| Container Type               | Stored       | Proj.       | Total        |
| RH Can w/ Remov Lid - Dir Ld | 107.7        | 28.5        | 136.2        |
| <b>Final Form Total</b>      | <b>107.7</b> | <b>28.5</b> | <b>136.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 96.20                                |
| Aluminum-based Metals/Alloys    | 0.80                                 |
| Other Metals                    | 10.65                                |
| Other Inorganic Materials       | 2.40                                 |
| Cellulosics                     | 80.90                                |
| Rubber                          | 7.40                                 |
| Plastics                        | 64.90                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 1.50                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.29E-01                                   |
| Am-243  | 3.83E-04                                   |
| Cm-244  | 3.76E-01                                   |
| Cs-137  | 1.94E-01                                   |
| Np-237  | 9.13E-07                                   |
| Pu-238  | 3.40E-03                                   |
| Pu-239  | 1.50E-02                                   |
| Pu-240  | 1.04E-02                                   |
| Pu-241  | 1.67E-02                                   |
| Pu-242  | 2.73E-05                                   |
| Pu-244  | 1.88E-12                                   |
| Sr-90   | 9.23E-02                                   |
| Th-229  | 1.05E-05                                   |
| Th-230  | 1.97E-10                                   |
| Th-232  | 5.12E-08                                   |
| U-233   | 5.34E-03                                   |
| U-234   | 1.15E-06                                   |
| U-235   | 5.60E-07                                   |
| U-236   | 4.16E-08                                   |
| U-238   | 3.53E-07                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream consists of RH TRU waste which is classified as contaminated equipment, decontaminated debris or dry solids. The physical form is solid. The radionuclide information has been updated with information from a 1997 analysis campaign.

Waste Stream ID: **OR-W212**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                               |                       |                 |                                       |            |          |    |
|-------------|-------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Oak Ridge National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | RH |
| Source Cat. | Other/Multiple Sources        | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | RH Mixed Debris               |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |              |             |              |
|------------------------------|--------------|-------------|--------------|
| Container Type               | Stored       | Proj.       | Total        |
| 55-gal Drum Dir Ld w/o Liner | 0.6          | 0.0         | 0.6          |
| Cask - Misc                  | 10.6         | 0.0         | 10.6         |
| Cask - Misc                  | 127.8        | 10.0        | 137.8        |
| <b>Current Form Total</b>    | <b>139.0</b> | <b>10.0</b> | <b>149.0</b> |

| Final Form Volumes           |             |             |             |
|------------------------------|-------------|-------------|-------------|
| Container Type               | Stored      | Proj.       | Total       |
| RH Can w/ Remov Lid - Dir Ld | 53.4        | 14.2        | 67.6        |
| <b>Final Form Total</b>      | <b>53.4</b> | <b>14.2</b> | <b>67.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 96.20                                |
| Aluminum-based Metals/Alloys    | 0.80                                 |
| Other Metals                    | 10.65                                |
| Other Inorganic Materials       | 2.40                                 |
| Cellulosics                     | 80.90                                |
| Rubber                          | 7.40                                 |
| Plastics                        | 64.90                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 1.50                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.99E-01                                   |
| Cm-244  | 9.31E-01                                   |
| Cs-137  | 1.48E+01                                   |
| Np-237  | 2.06E-06                                   |
| Pu-238  | 3.61E-01                                   |
| Pu-239  | 3.92E-03                                   |
| Pu-240  | 3.17E-03                                   |
| Pu-241  | 4.53E-02                                   |
| Pu-244  | 1.74E-13                                   |
| Sr-90   | 9.30E+00                                   |
| Th-229  | 4.25E-09                                   |
| Th-230  | 2.27E-09                                   |
| Th-232  | 7.19E-06                                   |
| U-233   | 2.16E-06                                   |
| U-234   | 2.34E-05                                   |
| U-235   | 3.36E-06                                   |
| U-236   | 1.12E-09                                   |

## Haz. Waste No(s).

D006, D008, D009,  
D022, F001, F002,  
F004, F005No TRUCON  
Codes Provided

## Waste Stream Description

Radionuclides from updated model. Mixed waste treated to LDR.

Waste Stream ID: **OR-W213**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                               |                       |                 |                                       |            |          |    |
|-------------|-------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Oak Ridge National Laboratory | Final Waste Form      | Soils           | Waste Matrix Code                     | S4200      | Handling | RH |
| Source Cat. | Remediation/D&D Waste         | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | ER RH TRU Heterogeneous Soils |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |             |              |              |
|------------------------------|-------------|--------------|--------------|
| Container Type               | Stored      | Proj.        | Total        |
| 55-gal Drum Dir Ld w/o Liner | 0.0         | 104.0        | 104.0        |
| Box - Misc                   | 6.4         | 0.0          | 6.4          |
| Box - Misc                   | 7.6         | 0.0          | 7.6          |
| Box - Misc                   | 18.4        | 0.0          | 18.4         |
| <b>Current Form Total</b>    | <b>32.3</b> | <b>104.0</b> | <b>136.3</b> |

| Final Form Volumes           |             |              |              |
|------------------------------|-------------|--------------|--------------|
| Container Type               | Stored      | Proj.        | Total        |
| RH Can w/ Remov Lid - Dir Ld | 45.4        | 148.6        | 194.0        |
| <b>Final Form Total</b>      | <b>45.4</b> | <b>148.6</b> | <b>194.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 1300.00                              |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.43E-02                                   |
| Am-243  | 1.06E-05                                   |
| Cm-244  | 1.03E-04                                   |
| Cs-137  | 3.60E-01                                   |
| Np-237  | 3.54E-05                                   |
| Pu-238  | 6.44E-03                                   |
| Pu-239  | 1.69E-02                                   |
| Pu-240  | 2.07E-05                                   |
| Pu-241  | 8.01E-02                                   |
| Pu-242  | 9.31E-06                                   |
| Sr-90   | 3.01E-03                                   |
| Th-229  | 2.50E-02                                   |
| Th-230  | 4.17E-05                                   |
| Th-232  | 4.01E-04                                   |
| U-233   | 3.25E-02                                   |
| U-234   | 1.84E-03                                   |
| U-235   | 2.75E-05                                   |
| U-236   | 2.92E-05                                   |
| U-238   | 3.49E-04                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste is made up of soils.

Waste Stream ID: **OR-W214**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                |                       |                 |                                       |            |          |    |
|-------------|--------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Oak Ridge National Laboratory  | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | RH |
| Source Cat. | Other/Multiple Sources         | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | PCB Contaminated RH-TRU Debris |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 0.2        | 0.0        | 0.2        |
| Cask - Misc                  | 1.7        | 0.0        | 1.7        |
| <b>Current Form Total</b>    | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid - Dir Ld | 2.7        | 0.0        | 2.7        |
| <b>Final Form Total</b>      | <b>2.7</b> | <b>0.0</b> | <b>2.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 96.20                                |
| Aluminum-based Metals/Alloys    | 0.80                                 |
| Other Metals                    | 10.65                                |
| Other Inorganic Materials       | 2.40                                 |
| Cellulosics                     | 80.90                                |
| Rubber                          | 7.40                                 |
| Plastics                        | 64.90                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 1.50                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.16E-03                                   |
| Cm-244  | 7.02E-05                                   |
| Cs-137  | 2.47E-01                                   |
| Np-237  | 4.45E-05                                   |
| Pu-238  | 1.86E-04                                   |
| Pu-239  | 2.08E-03                                   |
| Pu-240  | 2.39E-07                                   |
| Sr-90   | 4.08E-03                                   |
| Th-229  | 6.19E-08                                   |
| Th-230  | 1.56E-12                                   |
| Th-232  | 3.10E-23                                   |
| U-233   | 3.14E-05                                   |
| U-234   | 1.53E-08                                   |
| U-235   | 8.41E-11                                   |
| U-236   | 8.44E-14                                   |
| U-238   | 3.93E-05                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

PCB contamination 240 ppm

Waste Stream ID: **OR-W215**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                       |                                       |            |          |    |
|-------------|--|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Oak Ridge National Laboratory                | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3121      | Handling | RH |
| Source Cat. | Pollution Control or Waste Treatment Process | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | RH-TRU Solidified Sludge                     |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |               |              |               |
|---------------------------|---------------|--------------|---------------|
| Container Type            | Stored        | Proj.        | Total         |
| Tank(s)                   | 0.0           | 369.0        | 369.0         |
| Tank(s)                   | 1581.0        | 0.0          | 1581.0        |
| <b>Current Form Total</b> | <b>1581.0</b> | <b>369.0</b> | <b>1950.0</b> |

| Final Form Volumes           |              |              |              |
|------------------------------|--------------|--------------|--------------|
| Container Type               | Stored       | Proj.        | Total        |
| RH Can w/ Remov Lid - Dir Ld | 721.8        | 168.2        | 890.0        |
| <b>Final Form Total</b>      | <b>721.8</b> | <b>168.2</b> | <b>890.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1710.00                              |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.44E+00                                   |
| Cm-244  | 4.52E+00                                   |
| Cs-137  | 7.39E+01                                   |
| Np-237  | 8.25E-05                                   |
| Pu-238  | 1.38E+00                                   |
| Pu-239  | 9.76E-01                                   |
| Pu-240  | 1.06E-01                                   |
| Pu-241  | 1.28E+00                                   |
| Pu-242  | 4.34E-04                                   |
| Pu-244  | 4.66E-15                                   |
| Sr-90   | 2.00E+02                                   |
| Th-229  | 9.21E-04                                   |
| Th-230  | 5.64E-06                                   |
| Th-232  | 3.87E-03                                   |
| U-233   | 4.68E-01                                   |
| U-234   | 2.99E-02                                   |
| U-235   | 1.49E-03                                   |
| U-236   | 5.27E-05                                   |
| U-238   | 5.94E-02                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

Waste is treated stream from a mixture from the Melton Valley Storage Tanks (MVST), MVST, Capacity Increase Project Tanks, and Bethel Valley Evaporator Storage Tanks. Waste from the Old Hydrofracture (OHF) and Gunite and Associated Tanks (GAAT) was previously mixed into the MVST.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.



Waste Stream ID: **RF001.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Combustible     | Waste Matrix Code | S5390                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                    |                   |              |
|------------------------------------|-------------------|--------------|
| Container Type                     | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner        | WP-RF001.01       | 745.1        |
| 55-gal Drum Dir Ld w/o Liner       | WP-RF001.01       | 92.4         |
| SWB Dir Ld w/o Liner               | WP-RF001.01       | 100.2        |
| SWB w/ 4 - 55-gal Drums w/ Liners  | WP-RF001.01       | 37.8         |
| SWB w/ 4 - 55-gal Drums w/o Liners | WP-RF001.01       | 3.8          |
| <b>Shipped Total</b>               |                   | <b>979.2</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 1.08                                 |
| Aluminum-based Metals/Alloys | 0.01                                 |
| Other Metals                 | 0.24                                 |
| Other Inorganic Materials    | 2.65                                 |
| Cellulosics                  | 27.92                                |
| Rubber                       | 0.74                                 |
| Plastics                     | 78.05                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.02                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.51E+00                                   |
| Am-243  | 1.21E-06                                   |
| Np-237  | 5.56E-05                                   |
| Pu-238  | 1.49E-01                                   |
| Pu-239  | 3.44E+00                                   |
| Pu-240  | 7.99E-01                                   |
| Pu-241  | 1.18E+01                                   |
| Pu-242  | 1.20E-04                                   |
| Th-229  | 4.33E-08                                   |
| Th-230  | 1.10E-08                                   |
| Th-232  | 2.11E-17                                   |
| U-233   | 7.70E-05                                   |
| U-234   | 2.06E-04                                   |
| U-235   | 9.78E-06                                   |
| U-236   | 1.42E-07                                   |
| U-238   | 2.26E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

116/216

## Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **RF002.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Uncategorized Metal | Waste Matrix Code | S5111                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                   |                   |               |
|-----------------------------------|-------------------|---------------|
| Container Type                    | Ref. Waste Stream | Volume        |
| 55-gal Drum Dir Ld w/ Liner       | WP-RF002.01       | 399.4         |
| 55-gal Drum Dir Ld w/o Liner      | WP-RF002.01       | 32.2          |
| 55-gal POC - 12" w/ Liner         | WP-RF002.01       | 13.7          |
| SWB Dir Ld w/o Liner              | WP-RF002.01       | 984.7         |
| SWB w/ 4 - 55-gal Drums w/ Liners | WP-RF002.01       | 17.0          |
| TDOP w/ 1 SWB w/o Liners          | WP-RF002.01       | 14.4          |
| <b>Shipped Total</b>              |                   | <b>1461.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 230.79                               |
| Aluminum-based Metals/Alloys | 1.27                                 |
| Other Metals                 | 10.50                                |
| Other Inorganic Materials    | 0.49                                 |
| Cellulosics                  | 7.19                                 |
| Rubber                       | 0.20                                 |
| Plastics                     | 4.84                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.01                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.49E-01                                   |
| Am-243  | 7.24E-07                                   |
| Cs-137  | 2.18E-07                                   |
| Np-237  | 7.96E-06                                   |
| Pu-238  | 1.48E-01                                   |
| Pu-239  | 3.02E+00                                   |
| Pu-240  | 7.10E-01                                   |
| Pu-241  | 1.28E+01                                   |
| Pu-242  | 8.39E-05                                   |
| Th-229  | 7.01E-09                                   |
| Th-230  | 4.00E-09                                   |
| Th-232  | 1.30E-17                                   |
| U-233   | 1.50E-05                                   |
| U-234   | 9.01E-05                                   |
| U-235   | 4.80E-06                                   |
| U-236   | 1.05E-07                                   |
| U-238   | 1.94E-04                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

117/217, 131/231

## Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **RF003.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5126                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                    |                   |              |
|------------------------------------|-------------------|--------------|
| Container Type                     | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner        | WP-RF003.01       | 65.9         |
| 55-gal Drum Dir Ld w/o Liner       | WP-RF003.01       | 0.4          |
| 55-gal POC - 12" w/ Liner          | WP-RF003.01       | 275.8        |
| SWB w/ 4 - 55-gal Drums w/ Liners  | WP-RF003.01       | 9.5          |
| SWB w/ 4 - 55-gal Drums w/o Liners | WP-RF003.01       | 3.8          |
| <b>Shipped Total</b>               |                   | <b>355.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 13.10                                |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.07                                 |
| Other Inorganic Materials    | 70.17                                |
| Cellulosics                  | 1.84                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 2.72                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.30                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.22E+00                                   |
| Np-237  | 2.40E-05                                   |
| Pu-238  | 1.48E+00                                   |
| Pu-239  | 3.57E+01                                   |
| Pu-240  | 8.63E+00                                   |
| Pu-241  | 1.02E+02                                   |
| Pu-242  | 8.25E-04                                   |
| Th-229  | 1.60E-08                                   |
| Th-230  | 2.99E-09                                   |
| Th-232  | 2.28E-16                                   |
| U-233   | 2.84E-05                                   |
| U-234   | 6.82E-05                                   |
| U-235   | 1.61E-06                                   |
| U-236   | 1.54E-06                                   |
| U-238   | 3.67E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

115/215

## Waste Stream Description

N/A

Waste Stream ID: **RF004.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5122                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                    |                   |              |
|------------------------------------|-------------------|--------------|
| Container Type                     | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner        | WP-RF004.01       | 263.3        |
| 55-gal Drum Dir Ld w/o Liner       | WP-RF004.01       | 7.9          |
| 55-gal POC - 12" w/ Liner          | WP-RF004.01       | 2.3          |
| SWB Dir Ld w/o Liner               | WP-RF004.01       | 1.9          |
| SWB w/ 4 - 55-gal Drums w/ Liners  | WP-RF004.01       | 5.7          |
| SWB w/ 4 - 55-gal Drums w/o Liners | WP-RF004.01       | 1.9          |
| <b>Shipped Total</b>               |                   | <b>283.0</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.60                                 |
| Aluminum-based Metals/Alloys | 0.02                                 |
| Other Metals                 | 0.46                                 |
| Other Inorganic Materials    | 464.77                               |
| Cellulosics                  | 11.91                                |
| Rubber                       | 0.00                                 |
| Plastics                     | 4.75                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.04                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.20E-01                                   |
| Am-243  | 3.12E-09                                   |
| Np-237  | 5.12E-06                                   |
| Pu-238  | 1.15E-01                                   |
| Pu-239  | 2.43E+00                                   |
| Pu-240  | 5.62E-01                                   |
| Pu-241  | 1.11E+01                                   |
| Pu-242  | 6.77E-05                                   |
| Th-229  | 1.44E-14                                   |
| Th-230  | 2.63E-09                                   |
| Th-232  | 6.59E-18                                   |
| U-233   | 7.93E-11                                   |
| U-234   | 7.37E-05                                   |
| U-235   | 2.34E-06                                   |
| U-236   | 6.67E-08                                   |
| U-238   | 2.66E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

118/218

## Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **RF005.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |            |                                       |      |
|-------------|---|-----------------------|-----------------|-------------------|------------|---------------------------------------|------|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Salt Waste      | Waste Matrix Code | S3141      | Handling                              | CH   |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006 | Activity Concentrations Decayed to CY | 2006 |
| Stream Name | N/A                                       |                       |                 |                   |            |                                       |      |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes           |                   |              |
|---------------------------|-------------------|--------------|
| Container Type            | Ref. Waste Stream | Volume       |
| 55-gal POC - 12" w/ Liner | WP-RF005.01       | 119.4        |
| <b>Shipped Total</b>      |                   | <b>119.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 19.04                                |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 3.07                                 |
| Other Inorganic Materials    | 19.27                                |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 1.73                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.43E+01                                   |
| Np-237  | 1.36E-04                                   |
| Pu-238  | 1.73E+00                                   |
| Pu-239  | 4.01E+01                                   |
| Pu-240  | 1.03E+01                                   |
| Pu-241  | 6.77E+01                                   |
| Pu-242  | 8.47E-04                                   |
| Th-229  | 7.75E-13                                   |
| Th-230  | 1.47E-09                                   |
| Th-232  | 4.83E-16                                   |
| U-233   | 2.72E-09                                   |
| U-234   | 4.05E-05                                   |
| U-235   | 9.97E-07                                   |
| U-236   | 2.44E-06                                   |
| U-238   | 1.02E-12                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

124/224

## Waste Stream Description

N/A

Waste Stream ID: **RF005.02-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Salt Waste      | Waste Matrix Code | S3141                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes           |                   |             |
|---------------------------|-------------------|-------------|
| Container Type            | Ref. Waste Stream | Volume      |
| 55-gal POC - 12" w/ Liner | WP-RF005.02       | 78.4        |
| <b>Shipped Total</b>      |                   | <b>78.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 13.92                                |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.23                                 |
| Other Inorganic Materials    | 27.49                                |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 0.00                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.23E+01                                   |
| Np-237  | 2.17E-04                                   |
| Pu-238  | 1.55E+00                                   |
| Pu-239  | 3.70E+01                                   |
| Pu-240  | 9.73E+00                                   |
| Pu-241  | 5.68E+01                                   |
| Pu-242  | 8.23E-04                                   |
| Th-229  | 9.07E-13                                   |
| Th-230  | 1.49E-09                                   |
| Th-232  | 3.49E-16                                   |
| U-233   | 3.70E-09                                   |
| U-234   | 3.94E-05                                   |
| U-235   | 5.02E-07                                   |
| U-236   | 2.02E-06                                   |
| U-238   | 2.19E-09                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

124/224

## Waste Stream Description

N/A

Waste Stream ID: **RF006.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |            |                                       |      |
|-------------|---|-----------------------|---------------------|-------------------|------------|---------------------------------------|------|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5123      | Handling                              | CH   |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006 | Activity Concentrations Decayed to CY | 2006 |
| Stream Name | N/A                                       |                       |                     |                   |            |                                       |      |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |              |
|-----------------------------|-------------------|--------------|
| Container Type              | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner | WP-RF006.01       | 2.7          |
| 55-gal POC - 12" w/ Liner   | WP-RF006.01       | 233.0        |
| <b>Shipped Total</b>        |                   | <b>235.7</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 8.48                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.06                                 |
| Other Inorganic Materials    | 32.83                                |
| Cellulosics                  | 0.03                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 0.67                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.26E+00                                   |
| Np-237  | 4.31E-05                                   |
| Pu-238  | 1.95E+00                                   |
| Pu-239  | 3.91E+01                                   |
| Pu-240  | 9.45E+00                                   |
| Pu-241  | 1.28E+02                                   |
| Pu-242  | 1.26E-03                                   |
| Th-229  | 9.89E-13                                   |
| Th-230  | 7.85E-09                                   |
| Th-232  | 1.36E-15                                   |
| U-233   | 1.76E-09                                   |
| U-234   | 1.03E-04                                   |
| U-235   | 1.35E-06                                   |
| U-236   | 3.93E-06                                   |
| U-238   | 5.89E-09                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

118/218

## Waste Stream Description

N/A

Waste Stream ID: **RF008.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5123                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                   |                   |             |
|-----------------------------------|-------------------|-------------|
| Container Type                    | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner       | WP-RF008.01       | 4.4         |
| 55-gal Drum Dir Ld w/o Liner      | WP-RF008.01       | 0.2         |
| 55-gal POC - 12" w/ Liner         | WP-RF008.01       | 90.7        |
| SWB w/ 4 - 55-gal Drums w/ Liners | WP-RF008.01       | 1.9         |
| <b>Shipped Total</b>              |                   | <b>97.2</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 5.36                                 |
| Aluminum-based Metals/Alloys | 0.10                                 |
| Other Metals                 | 1.39                                 |
| Other Inorganic Materials    | 56.30                                |
| Cellulosics                  | 0.36                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 1.05                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.76E+00                                   |
| Np-237  | 1.57E-04                                   |
| Pu-238  | 2.03E+00                                   |
| Pu-239  | 3.49E+01                                   |
| Pu-240  | 9.58E+00                                   |
| Pu-241  | 1.11E+02                                   |
| Pu-242  | 1.40E-03                                   |
| Th-229  | 1.41E-12                                   |
| Th-230  | 1.49E-09                                   |
| Th-232  | 3.44E-16                                   |
| U-233   | 4.39E-09                                   |
| U-234   | 4.42E-05                                   |
| U-235   | 5.23E-07                                   |
| U-236   | 1.99E-06                                   |
| U-238   | 7.76E-10                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

118/218

## Waste Stream Description

N/A



Waste Stream ID: **RF009.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |            |                                       |      |
|-------------|---|-----------------------|-----------------|-------------------|------------|---------------------------------------|------|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Salt Waste      | Waste Matrix Code | S3141      | Handling                              | CH   |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006 | Activity Concentrations Decayed to CY | 2006 |
| Stream Name | N/A                                       |                       |                 |                   |            |                                       |      |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                    |                   |               |
|------------------------------------|-------------------|---------------|
| Container Type                     | Ref. Waste Stream | Volume        |
| 55-gal Drum Dir Ld w/ Liner        | WP-RF009.01       | 3.3           |
| 55-gal Drum Dir Ld w/o Liner       | WP-RF009.01       | 8.5           |
| 55-gal POC - 12" w/ Liner          | WP-RF009.01       | 1311.2        |
| SWB w/ 4 - 55-gal Drums w/o Liners | WP-RF009.01       | 3.8           |
| <b>Shipped Total</b>               |                   | <b>1326.9</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 10.46                                |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 4.01                                 |
| Other Inorganic Materials    | 17.82                                |
| Cellulosics                  | 0.04                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 0.93                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.05E+01                                   |
| Np-237  | 3.62E-04                                   |
| Pu-238  | 1.48E+00                                   |
| Pu-239  | 4.14E+01                                   |
| Pu-240  | 1.03E+01                                   |
| Pu-241  | 7.18E+01                                   |
| Pu-242  | 1.03E-03                                   |
| Th-229  | 2.15E-12                                   |
| Th-230  | 1.09E-09                                   |
| Th-232  | 2.71E-16                                   |
| U-233   | 8.05E-09                                   |
| U-234   | 3.29E-05                                   |
| U-235   | 4.76E-07                                   |
| U-236   | 1.83E-06                                   |
| U-238   | 2.05E-09                                   |

No Hazardous Waste Numbers Provided

**TRUCON Code(s)**  
 124/224, 130/230

## Waste Stream Description

N/A

Waste Stream ID: **RF010.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Filter          | Waste Matrix Code | S5410                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                    |                   |              |
|------------------------------------|-------------------|--------------|
| Container Type                     | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner        | WP-RF010.01       | 274.6        |
| 55-gal Drum Dir Ld w/o Liner       | WP-RF010.01       | 12.9         |
| SWB Dir Ld w/o Liner               | WP-RF010.01       | 264.6        |
| SWB w/ 4 - 55-gal Drums w/ Liners  | WP-RF010.01       | 62.4         |
| SWB w/ 4 - 55-gal Drums w/o Liners | WP-RF010.01       | 15.1         |
| <b>Shipped Total</b>               |                   | <b>629.5</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 12.18                                |
| Aluminum-based Metals/Alloys | 8.77                                 |
| Other Metals                 | 0.98                                 |
| Other Inorganic Materials    | 8.04                                 |
| Cellulosics                  | 36.45                                |
| Rubber                       | 3.69                                 |
| Plastics                     | 9.49                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.29                                 |
| Organic Matrix               | 0.03                                 |
| Soils/gravel                 | 0.13                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.24E+00                                   |
| Am-243  | 6.52E-08                                   |
| Np-237  | 1.21E-05                                   |
| Pu-238  | 4.00E-01                                   |
| Pu-239  | 9.94E+00                                   |
| Pu-240  | 2.32E+00                                   |
| Pu-241  | 2.96E+01                                   |
| Pu-242  | 2.53E-04                                   |
| Th-229  | 4.91E-14                                   |
| Th-230  | 8.97E-09                                   |
| Th-232  | 4.25E-17                                   |
| U-233   | 2.22E-10                                   |
| U-234   | 2.02E-04                                   |
| U-235   | 6.38E-06                                   |
| U-236   | 3.44E-07                                   |
| U-238   | 5.68E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

119/219, 130/230

## Waste Stream Description

N/A

Waste Stream ID: **RF011.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |            |                                       |      |
|-------------|---|-----------------------|---------------------|-------------------|------------|---------------------------------------|------|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5129      | Handling                              | CH   |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006 | Activity Concentrations Decayed to CY | 2006 |
| Stream Name | N/A                                       |                       |                     |                   |            |                                       |      |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                   |                   |             |
|-----------------------------------|-------------------|-------------|
| Container Type                    | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner       | WP-RF011.01       | 49.5        |
| 55-gal Drum Dir Ld w/o Liner      | WP-RF011.01       | 1.7         |
| SWB w/ 4 - 55-gal Drums w/ Liners | WP-RF011.01       | 28.4        |
| <b>Shipped Total</b>              |                   | <b>79.5</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 10.77                                |
| Aluminum-based Metals/Alloys | 0.01                                 |
| Other Metals                 | 0.04                                 |
| Other Inorganic Materials    | 17.84                                |
| Cellulosics                  | 1.61                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 1.75                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.74E+00                                   |
| Np-237  | 6.89E-06                                   |
| Pu-238  | 7.91E-01                                   |
| Pu-239  | 1.87E+01                                   |
| Pu-240  | 4.50E+00                                   |
| Pu-241  | 4.96E+01                                   |
| Pu-242  | 3.85E-04                                   |
| Th-229  | 1.47E-14                                   |
| Th-230  | 4.85E-10                                   |
| Th-232  | 5.27E-17                                   |
| U-233   | 8.79E-11                                   |
| U-234   | 1.80E-05                                   |
| U-235   | 3.61E-07                                   |
| U-236   | 5.33E-07                                   |
| U-238   | 5.29E-08                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

122/222

## Waste Stream Description

N/A

Waste Stream ID: **RF015.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |            |                                       |      |
|-------------|---|-----------------------|---------------------|-------------------|------------|---------------------------------------|------|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5123      | Handling                              | CH   |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006 | Activity Concentrations Decayed to CY | 2006 |
| Stream Name | N/A                                       |                       |                     |                   |            |                                       |      |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |            |
|-----------------------------|-------------------|------------|
| Container Type              | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner | WP-RF015.01       | 1.7        |
| <b>Shipped Total</b>        |                   | <b>1.7</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 19.17                                |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 5.05                                 |
| Cellulosics                  | 12.98                                |
| Rubber                       | 0.00                                 |
| Plastics                     | 1.62                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.03E+00                                   |
| Np-237  | 5.03E-05                                   |
| Pu-238  | 5.72E-01                                   |
| Pu-239  | 1.13E+01                                   |
| Pu-240  | 2.63E+00                                   |
| Pu-241  | 5.84E+01                                   |
| Pu-242  | 3.50E-04                                   |
| Th-229  | 1.55E-13                                   |
| Th-230  | 1.19E-10                                   |
| Th-232  | 3.09E-17                                   |
| U-233   | 8.33E-10                                   |
| U-234   | 6.59E-06                                   |
| U-235   | 4.45E-08                                   |
| U-236   | 3.12E-07                                   |
| U-238   | 2.11E-13                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

122/222

## Waste Stream Description

N/A

Waste Stream ID: **RF029.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                    |                   |               |
|------------------------------------|-------------------|---------------|
| Container Type                     | Ref. Waste Stream | Volume        |
| 55-gal Drum Dir Ld w/ Liner        | WP-RF029.01       | 13.9          |
| 55-gal Drum Dir Ld w/o Liner       | WP-RF029.01       | 2.7           |
| 55-gal POC - 12" w/ Liner          | WP-RF029.01       | 3.1           |
| SWB Dir Ld w/o Liner               | WP-RF029.01       | 4316.8        |
| SWB w/ 4 - 55-gal Drums w/o Liners | WP-RF029.01       | 5.7           |
| TDOP w/ 1 SWB w/o Liners           | WP-RF029.01       | 4.8           |
| <b>Shipped Total</b>               |                   | <b>4347.0</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 168.14                               |
| Aluminum-based Metals/Alloys | 1.51                                 |
| Other Metals                 | 0.58                                 |
| Other Inorganic Materials    | 13.97                                |
| Cellulosics                  | 17.24                                |
| Rubber                       | 1.33                                 |
| Plastics                     | 30.02                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.01                                 |
| Organic Matrix               | 0.03                                 |
| Soils/gravel                 | 0.16                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.72E-01                                   |
| Am-243  | 3.33E-07                                   |
| Cs-137  | 6.15E-09                                   |
| Np-237  | 5.57E-06                                   |
| Pu-238  | 8.51E-02                                   |
| Pu-239  | 1.58E+00                                   |
| Pu-240  | 3.80E-01                                   |
| Pu-241  | 8.89E+00                                   |
| Pu-242  | 5.09E-05                                   |
| Pu-244  | 2.38E-21                                   |
| Sr-90   | 4.20E-11                                   |
| Th-229  | 9.71E-15                                   |
| Th-230  | 5.15E-10                                   |
| Th-232  | 2.50E-18                                   |
| U-233   | 7.00E-11                                   |
| U-234   | 1.94E-05                                   |
| U-235   | 6.10E-07                                   |
| U-236   | 3.38E-08                                   |
| U-238   | 2.89E-07                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

121/221, 130/230

## Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **RF031.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |            |                                       |      |
|-------------|---|-----------------------|-----------------|-------------------|------------|---------------------------------------|------|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5313      | Handling                              | CH   |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006 | Activity Concentrations Decayed to CY | 2006 |
| Stream Name | N/A                                       |                       |                 |                   |            |                                       |      |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | WP-RF031.01       | 15.2        |
| 55-gal Drum Dir Ld w/o Liner | WP-RF031.01       | 5.0         |
| 55-gal POC - 12" w/ Liner    | WP-RF031.01       | 0.4         |
| <b>Shipped Total</b>         |                   | <b>20.6</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.34                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.23                                 |
| Other Inorganic Materials    | 1.10                                 |
| Cellulosics                  | 9.68                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 46.42                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 6.07                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.24E-01                                   |
| Np-237  | 2.43E-06                                   |
| Pu-238  | 1.13E-01                                   |
| Pu-239  | 2.34E+00                                   |
| Pu-240  | 5.42E-01                                   |
| Pu-241  | 1.17E+01                                   |
| Pu-242  | 6.42E-05                                   |
| Th-229  | 1.85E-15                                   |
| Th-230  | 7.87E-10                                   |
| Th-232  | 1.59E-18                                   |
| U-233   | 2.01E-11                                   |
| U-234   | 4.41E-05                                   |
| U-235   | 1.42E-06                                   |
| U-236   | 3.21E-08                                   |
| U-238   | 1.99E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
121/221, 130/230

## Waste Stream Description

N/A

Waste Stream ID: **RF032.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5129                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |              |
|-----------------------------|-------------------|--------------|
| Container Type              | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner | WP-RF032.01       | 3.1          |
| 55-gal POC - 12" w/ Liner   | WP-RF032.01       | 206.1        |
| <b>Shipped Total</b>        |                   | <b>209.2</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 15.54                                |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.23                                 |
| Other Inorganic Materials    | 31.96                                |
| Cellulosics                  | 0.04                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 0.06                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.09E+01                                   |
| Np-237  | 1.18E-04                                   |
| Pu-238  | 1.50E+00                                   |
| Pu-239  | 4.12E+01                                   |
| Pu-240  | 9.67E+00                                   |
| Pu-241  | 9.07E+01                                   |
| Pu-242  | 7.24E-04                                   |
| Th-229  | 5.32E-13                                   |
| Th-230  | 8.70E-10                                   |
| Th-232  | 1.77E-16                                   |
| U-233   | 2.33E-09                                   |
| U-234   | 3.01E-05                                   |
| U-235   | 4.75E-07                                   |
| U-236   | 1.43E-06                                   |
| U-238   | 2.41E-09                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

122/222

## Waste Stream Description

N/A

Waste Stream ID: **RF033.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3119                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | WP-RF033.01       | 12.1        |
| 55-gal Drum Dir Ld w/o Liner | WP-RF033.01       | 1.7         |
| 55-gal POC - 12" w/ Liner    | WP-RF033.01       | 11.9        |
| <b>Shipped Total</b>         |                   | <b>25.6</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 16.37                                |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 1.27                                 |
| Other Inorganic Materials    | 109.77                               |
| Cellulosics                  | 0.20                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 27.33                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.09                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.33E+00                                   |
| Np-237  | 3.00E-05                                   |
| Pu-238  | 1.36E+00                                   |
| Pu-239  | 3.12E+01                                   |
| Pu-240  | 7.29E+00                                   |
| Pu-241  | 1.15E+02                                   |
| Pu-242  | 7.19E-04                                   |
| Th-229  | 8.42E-14                                   |
| Th-230  | 7.23E-10                                   |
| Th-232  | 8.54E-17                                   |
| U-233   | 4.64E-10                                   |
| U-234   | 2.79E-05                                   |
| U-235   | 5.38E-07                                   |
| U-236   | 8.65E-07                                   |
| U-238   | 2.34E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

130/230

## Waste Stream Description

N/A



Waste Stream ID: **RF036.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5420      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | WP-RF036.01       | 44.1        |
| <b>Shipped Total</b>        |                   | <b>44.1</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 1.12                                 |
| Aluminum-based Metals/Alloys | 0.79                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 488.73                               |
| Cellulosics                  | 7.07                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 12.67                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.29                                 |
| Soils/gravel                 | 4.40                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.60E-01                                   |
| Am-243  | 1.85E-06                                   |
| Np-237  | 7.94E-06                                   |
| Pu-238  | 3.08E-01                                   |
| Pu-239  | 6.00E+00                                   |
| Pu-240  | 1.40E+00                                   |
| Pu-241  | 3.42E+01                                   |
| Pu-242  | 1.85E-04                                   |
| Th-229  | 6.16E-15                                   |
| Th-230  | 1.02E-09                                   |
| Th-232  | 4.10E-18                                   |
| U-233   | 6.66E-11                                   |
| U-234   | 5.75E-05                                   |
| U-235   | 2.51E-06                                   |
| U-236   | 8.31E-08                                   |
| U-238   | 6.76E-05                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **RF101.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Combustible     | Waste Matrix Code | S5390                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                   |                   |              |
|-----------------------------------|-------------------|--------------|
| Container Type                    | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner       | WP-RF101.01       | 114.6        |
| 55-gal Drum Dir Ld w/o Liner      | WP-RF101.01       | 13.1         |
| SWB Dir Ld w/o Liner              | WP-RF101.01       | 24.6         |
| SWB w/ 4 - 55-gal Drums w/ Liners | WP-RF101.01       | 22.7         |
| <b>Shipped Total</b>              |                   | <b>175.0</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 2.53                                 |
| Aluminum-based Metals/Alloys | 0.02                                 |
| Other Metals                 | 0.39                                 |
| Other Inorganic Materials    | 15.34                                |
| Cellulosics                  | 62.57                                |
| Rubber                       | 1.27                                 |
| Plastics                     | 30.20                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.84                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.92E+00                                   |
| Am-243  | 6.04E-06                                   |
| Np-237  | 1.28E-05                                   |
| Pu-238  | 4.64E-01                                   |
| Pu-239  | 9.65E+00                                   |
| Pu-240  | 2.26E+00                                   |
| Pu-241  | 4.07E+01                                   |
| Pu-242  | 2.64E-04                                   |
| Th-229  | 3.58E-14                                   |
| Th-230  | 8.65E-09                                   |
| Th-232  | 2.65E-17                                   |
| U-233   | 1.97E-10                                   |
| U-234   | 2.43E-04                                   |
| U-235   | 7.75E-06                                   |
| U-236   | 2.68E-07                                   |
| U-238   | 4.88E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D043, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

## TRUCON Code(s)

116/216

## Waste Stream Description

N/A

Waste Stream ID: **RF101.29-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Combustible     | Waste Matrix Code | S5390                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | WP-RF101.29       | 25.4        |
| 55-gal Drum Dir Ld w/o Liner | WP-RF101.29       | 3.1         |
| SWB Dir Ld w/o Liner         | WP-RF101.29       | 1.9         |
| <b>Shipped Total</b>         |                   | <b>30.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 1.43                                 |
| Aluminum-based Metals/Alloys | 0.03                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 12.48                                |
| Cellulosics                  | 51.65                                |
| Rubber                       | 5.43                                 |
| Plastics                     | 47.43                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.98E-01                                   |
| Np-237  | 6.11E-06                                   |
| Pu-238  | 2.54E-01                                   |
| Pu-239  | 5.15E+00                                   |
| Pu-240  | 1.20E+00                                   |
| Pu-241  | 2.03E+01                                   |
| Pu-242  | 1.39E-04                                   |
| Th-229  | 2.55E-14                                   |
| Th-230  | 8.24E-09                                   |
| Th-232  | 2.19E-17                                   |
| U-233   | 1.14E-10                                   |
| U-234   | 1.85E-04                                   |
| U-235   | 5.93E-06                                   |
| U-236   | 1.78E-07                                   |
| U-238   | 6.71E-06                                   |

## Haz. Waste No(s).

F001

## TRUCON Code(s)

116/216

## Waste Stream Description

N/A

Waste Stream ID: **RF101.30-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Combustible     | Waste Matrix Code | S5390      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                    |                   |              |
|------------------------------------|-------------------|--------------|
| Container Type                     | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner        | WP-RF101.30       | 79.5         |
| 55-gal Drum Dir Ld w/o Liner       | WP-RF101.30       | 5.8          |
| SWB Dir Ld w/o Liner               | WP-RF101.30       | 3.8          |
| SWB w/ 4 - 55-gal Drums w/ Liners  | WP-RF101.30       | 24.6         |
| SWB w/ 4 - 55-gal Drums w/o Liners | WP-RF101.30       | 3.8          |
| <b>Shipped Total</b>               |                   | <b>117.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.84                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.09                                 |
| Other Inorganic Materials    | 2.31                                 |
| Cellulosics                  | 40.50                                |
| Rubber                       | 0.80                                 |
| Plastics                     | 37.94                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.04                                 |
| Organic Matrix               | 0.03                                 |
| Soils/gravel                 | 0.01                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.06E+00                                   |
| Am-243  | 2.67E-06                                   |
| Np-237  | 2.18E-05                                   |
| Pu-238  | 3.31E-01                                   |
| Pu-239  | 7.49E+00                                   |
| Pu-240  | 1.76E+00                                   |
| Pu-241  | 2.64E+01                                   |
| Pu-242  | 2.16E-04                                   |
| Th-229  | 9.28E-14                                   |
| Th-230  | 6.40E-09                                   |
| Th-232  | 3.22E-17                                   |
| U-233   | 4.13E-10                                   |
| U-234   | 1.45E-04                                   |
| U-235   | 4.55E-06                                   |
| U-236   | 2.61E-07                                   |
| U-238   | 1.57E-06                                   |

## Haz. Waste No(s).

F001, F002

## TRUCON Code(s)

116/216, 119/219

## Waste Stream Description

N/A

Waste Stream ID: **RF101.31-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |            |                                       |      |
|-------------|---|-----------------------|-----------------|-------------------|------------|---------------------------------------|------|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Combustible     | Waste Matrix Code | S5390      | Handling                              | CH   |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006 | Activity Concentrations Decayed to CY | 2006 |
| Stream Name | N/A                                       |                       |                 |                   |            |                                       |      |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                   |                   |             |
|-----------------------------------|-------------------|-------------|
| Container Type                    | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner       | WP-RF101.31       | 43.9        |
| 55-gal Drum Dir Ld w/o Liner      | WP-RF101.31       | 5.4         |
| SWB Dir Ld w/o Liner              | WP-RF101.31       | 9.5         |
| SWB w/ 4 - 55-gal Drums w/ Liners | WP-RF101.31       | 3.8         |
| <b>Shipped Total</b>              |                   | <b>62.5</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 4.86                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.12                                 |
| Other Inorganic Materials    | 2.09                                 |
| Cellulosics                  | 65.86                                |
| Rubber                       | 0.69                                 |
| Plastics                     | 43.00                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.02                                 |
| Organic Matrix               | 0.02                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.09E+00                                   |
| Am-243  | 2.18E-07                                   |
| Np-237  | 5.34E-06                                   |
| Pu-238  | 1.69E-01                                   |
| Pu-239  | 3.74E+00                                   |
| Pu-240  | 8.88E-01                                   |
| Pu-241  | 1.26E+01                                   |
| Pu-242  | 1.32E-04                                   |
| Th-229  | 2.88E-14                                   |
| Th-230  | 4.94E-09                                   |
| Th-232  | 2.34E-17                                   |
| U-233   | 1.11E-10                                   |
| U-234   | 9.30E-05                                   |
| U-235   | 2.94E-06                                   |
| U-236   | 1.58E-07                                   |
| U-238   | 1.33E-06                                   |

## Haz. Waste No(s).

F001, F002, F005

## TRUCON Code(s)

116/216

## Waste Stream Description

N/A

Waste Stream ID: **RF101.35-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Combustible     | Waste Matrix Code | S5390      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                   |                   |             |
|-----------------------------------|-------------------|-------------|
| Container Type                    | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner       | WP-RF101.35       | 51.2        |
| 55-gal Drum Dir Ld w/o Liner      | WP-RF101.35       | 17.1        |
| SWB Dir Ld w/o Liner              | WP-RF101.35       | 3.8         |
| SWB w/ 4 - 55-gal Drums w/ Liners | WP-RF101.35       | 7.6         |
| <b>Shipped Total</b>              |                   | <b>79.6</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.72                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.57                                 |
| Other Inorganic Materials    | 2.66                                 |
| Cellulosics                  | 48.15                                |
| Rubber                       | 0.47                                 |
| Plastics                     | 58.97                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.97E+00                                   |
| Np-237  | 2.53E-05                                   |
| Pu-238  | 3.75E-01                                   |
| Pu-239  | 8.02E+00                                   |
| Pu-240  | 1.87E+00                                   |
| Pu-241  | 3.27E+01                                   |
| Pu-242  | 2.62E-04                                   |
| Th-229  | 1.11E-13                                   |
| Th-230  | 4.79E-08                                   |
| Th-232  | 3.43E-17                                   |
| U-233   | 4.91E-10                                   |
| U-234   | 1.07E-03                                   |
| U-235   | 3.42E-05                                   |
| U-236   | 2.78E-07                                   |
| U-238   | 2.75E-06                                   |

## Haz. Waste No(s).

F005

## TRUCON Code(s)

116/216

## Waste Stream Description

N/A

Waste Stream ID: **RF102.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5119                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                   |                   |              |
|-----------------------------------|-------------------|--------------|
| Container Type                    | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner       | WP-RF102.01       | 45.3         |
| 55-gal Drum Dir Ld w/o Liner      | WP-RF102.01       | 0.6          |
| SWB Dir Ld w/o Liner              | WP-RF102.01       | 175.8        |
| SWB w/ 4 - 55-gal Drums w/ Liners | WP-RF102.01       | 1.9          |
| <b>Shipped Total</b>              |                   | <b>223.6</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 234.12                               |
| Aluminum-based Metals/Alloys | 0.50                                 |
| Other Metals                 | 9.83                                 |
| Other Inorganic Materials    | 1.88                                 |
| Cellulosics                  | 6.47                                 |
| Rubber                       | 0.25                                 |
| Plastics                     | 4.10                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.53E-01                                   |
| Am-243  | 8.92E-07                                   |
| Cs-137  | 4.50E-05                                   |
| Np-237  | 6.48E-06                                   |
| Pu-238  | 1.33E-01                                   |
| Pu-239  | 2.56E+00                                   |
| Pu-240  | 6.11E-01                                   |
| Pu-241  | 1.32E+01                                   |
| Pu-242  | 7.93E-05                                   |
| Th-229  | 1.89E-14                                   |
| Th-230  | 6.89E-10                                   |
| Th-232  | 7.16E-18                                   |
| U-233   | 1.03E-10                                   |
| U-234   | 1.99E-05                                   |
| U-235   | 6.19E-07                                   |
| U-236   | 7.24E-08                                   |
| U-238   | 1.78E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D029, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

## TRUCON Code(s)

117/217

## Waste Stream Description

N/A

Waste Stream ID: **RF102.31-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                          |                   |                                       |          |    |
|-------------|---|-----------------------|--------------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Lead/Cadmium Metal Waste | Waste Matrix Code | S5112                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related          | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                          |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                   |                   |              |
|-----------------------------------|-------------------|--------------|
| Container Type                    | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner       | WP-RF102.31       | 22.3         |
| 55-gal Drum Dir Ld w/o Liner      | WP-RF102.31       | 1.0          |
| 55-gal POC - 12" w/ Liner         | WP-RF102.31       | 0.6          |
| SWB Dir Ld w/o Liner              | WP-RF102.31       | 96.4         |
| SWB w/ 4 - 55-gal Drums w/ Liners | WP-RF102.31       | 3.8          |
| <b>Shipped Total</b>              |                   | <b>124.1</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 189.33                               |
| Aluminum-based Metals/Alloys | 0.36                                 |
| Other Metals                 | 147.87                               |
| Other Inorganic Materials    | 0.16                                 |
| Cellulosics                  | 5.66                                 |
| Rubber                       | 1.89                                 |
| Plastics                     | 3.08                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.12E+00                                   |
| Am-243  | 1.55E-07                                   |
| Np-237  | 8.47E-06                                   |
| Pu-238  | 1.11E-01                                   |
| Pu-239  | 2.21E+00                                   |
| Pu-240  | 5.24E-01                                   |
| Pu-241  | 1.06E+01                                   |
| Pu-242  | 6.82E-05                                   |
| Th-229  | 2.40E-14                                   |
| Th-230  | 2.32E-09                                   |
| Th-232  | 6.14E-18                                   |
| U-233   | 1.32E-10                                   |
| U-234   | 6.51E-05                                   |
| U-235   | 2.23E-06                                   |
| U-236   | 6.21E-08                                   |
| U-238   | 1.72E-05                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

117/217

## Waste Stream Description

N/A



Waste Stream ID: **RF104.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5122                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                    |                   |             |
|------------------------------------|-------------------|-------------|
| Container Type                     | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner        | WP-RF104.01       | 35.2        |
| 55-gal Drum Dir Ld w/o Liner       | WP-RF104.01       | 2.1         |
| 55-gal POC - 12" w/ Liner          | WP-RF104.01       | 7.7         |
| SWB Dir Ld w/o Liner               | WP-RF104.01       | 5.7         |
| SWB w/ 4 - 55-gal Drums w/ Liners  | WP-RF104.01       | 1.9         |
| SWB w/ 4 - 55-gal Drums w/o Liners | WP-RF104.01       | 1.9         |
| <b>Shipped Total</b>               |                   | <b>54.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 5.65                                 |
| Aluminum-based Metals/Alloys | 0.01                                 |
| Other Metals                 | 1.43                                 |
| Other Inorganic Materials    | 213.89                               |
| Cellulosics                  | 7.04                                 |
| Rubber                       | 0.06                                 |
| Plastics                     | 5.63                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.20E+00                                   |
| Am-243  | 4.20E-06                                   |
| Np-237  | 1.80E-05                                   |
| Pu-238  | 2.98E-01                                   |
| Pu-239  | 7.52E+00                                   |
| Pu-240  | 1.77E+00                                   |
| Pu-241  | 2.47E+01                                   |
| Pu-242  | 1.72E-04                                   |
| Th-229  | 3.05E-14                                   |
| Th-230  | 4.52E-10                                   |
| Th-232  | 1.17E-17                                   |
| U-233   | 2.21E-10                                   |
| U-234   | 1.80E-05                                   |
| U-235   | 5.44E-07                                   |
| U-236   | 1.58E-07                                   |
| U-238   | 2.58E-06                                   |

## Haz. Waste No(s).

D005, D008, D009,  
D022, F001, F002,  
F005

## TRUCON Code(s)

118/218

## Waste Stream Description

N/A

Waste Stream ID: **RF107.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3190                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | WP-RF107.01       | 63.4        |
| <b>Shipped Total</b>        |                   | <b>63.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.17                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.73                                 |
| Other Inorganic Materials    | 13.61                                |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 1.11                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 776.54                               |
| Organic Matrix               | 11.45                                |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.14E+01                                   |
| Np-237  | 2.48E-04                                   |
| Pu-238  | 1.50E-01                                   |
| Pu-239  | 3.01E+00                                   |
| Pu-240  | 6.97E-01                                   |
| Pu-241  | 1.68E+01                                   |
| Pu-242  | 9.12E-05                                   |
| Th-229  | 1.88E-13                                   |
| Th-230  | 4.88E-09                                   |
| Th-232  | 2.04E-18                                   |
| U-233   | 2.05E-09                                   |
| U-234   | 2.72E-04                                   |
| U-235   | 1.75E-05                                   |
| U-236   | 4.14E-08                                   |
| U-238   | 9.43E-04                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D011

## TRUCON Code(s)

132/232

## Waste Stream Description

N/A

Waste Stream ID: **RF107.03-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3190                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | WP-RF107.03       | 60.7        |
| 55-gal Drum Dir Ld w/o Liner | WP-RF107.03       | 0.2         |
| <b>Shipped Total</b>         |                   | <b>60.9</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.45                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 0.00                                 |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 1.09                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 819.47                               |
| Organic Matrix               | 0.04                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.33E-01                                   |
| Np-237  | 1.94E-06                                   |
| Pu-238  | 1.92E-02                                   |
| Pu-239  | 3.80E-01                                   |
| Pu-240  | 8.84E-02                                   |
| Pu-241  | 2.14E+00                                   |
| Pu-242  | 1.16E-05                                   |
| Th-229  | 1.51E-15                                   |
| Th-230  | 2.28E-08                                   |
| Th-232  | 2.59E-19                                   |
| U-233   | 1.63E-11                                   |
| U-234   | 1.27E-03                                   |
| U-235   | 1.50E-04                                   |
| U-236   | 5.24E-09                                   |
| U-238   | 1.13E-02                                   |

## Haz. Waste No(s).

F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

111/211, 127/227

## Waste Stream Description

N/A

Waste Stream ID: **RF107.04-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3190                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                   |                   |              |
|-----------------------------------|-------------------|--------------|
| Container Type                    | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner       | WP-RF107.04       | 100.9        |
| 55-gal Drum Dir Ld w/o Liner      | WP-RF107.04       | 1.9          |
| SWB w/ 4 - 55-gal Drums w/ Liners | WP-RF107.04       | 7.6          |
| <b>Shipped Total</b>              |                   | <b>110.3</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.01                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 0.00                                 |
| Cellulosics                  | 0.07                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 1.64                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 954.33                               |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.25E-01                                   |
| Np-237  | 4.38E-06                                   |
| Pu-238  | 3.77E-02                                   |
| Pu-239  | 7.55E-01                                   |
| Pu-240  | 1.75E-01                                   |
| Pu-241  | 4.22E+00                                   |
| Pu-242  | 2.29E-05                                   |
| Th-229  | 3.40E-15                                   |
| Th-230  | 3.46E-10                                   |
| Th-232  | 5.13E-19                                   |
| U-233   | 3.67E-11                                   |
| U-234   | 1.93E-05                                   |
| U-235   | 1.91E-06                                   |
| U-236   | 1.04E-08                                   |
| U-238   | 1.40E-04                                   |

## Haz. Waste No(s).

D022, D028, D029,  
D030, D032, D034,  
F001, F002, F005

## TRUCON Code(s)

112/212

## Waste Stream Description

N/A

Waste Stream ID: **RF107.05-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3190                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |            |
|-----------------------------|-------------------|------------|
| Container Type              | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner | WP-RF107.05       | 4.4        |
| <b>Shipped Total</b>        |                   | <b>4.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 0.63                                 |
| Cellulosics                  | 8.65                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 2.35                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 601.28                               |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.03E+00                                   |
| Np-237  | 5.81E-06                                   |
| Pu-238  | 2.35E-01                                   |
| Pu-239  | 4.67E+00                                   |
| Pu-240  | 1.09E+00                                   |
| Pu-241  | 2.62E+01                                   |
| Pu-242  | 1.42E-04                                   |
| Th-229  | 4.40E-15                                   |
| Th-230  | 4.06E-08                                   |
| Th-232  | 3.18E-18                                   |
| U-233   | 4.78E-11                                   |
| U-234   | 2.26E-03                                   |
| U-235   | 7.28E-05                                   |
| U-236   | 6.44E-08                                   |
| U-238   | 6.43E-07                                   |

## Haz. Waste No(s).

D004, D005, D009,  
D010, D022, D027,  
D028, D029, D032,  
D033, D034, D043,  
F001, F002, F005,  
F006, F007, F009,  
P030, P098, P099,  
P106, U003, U103,  
U108

## TRUCON Code(s)

127/227

## Waste Stream Description

N/A

Waste Stream ID: **RF107.06-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3190                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | WP-RF107.06       | 14.4        |
| <b>Shipped Total</b>        |                   | <b>14.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.49                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 0.00                                 |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 8.25                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 873.52                               |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.72E-02                                   |
| Np-237  | 5.20E-08                                   |
| Pu-238  | 1.06E-02                                   |
| Pu-239  | 2.13E-01                                   |
| Pu-240  | 4.94E-02                                   |
| Pu-241  | 1.19E+00                                   |
| Pu-242  | 6.46E-06                                   |
| Th-229  | 3.34E-17                                   |
| Th-230  | 2.89E-09                                   |
| Th-232  | 1.45E-19                                   |
| U-233   | 3.80E-13                                   |
| U-234   | 1.61E-04                                   |
| U-235   | 1.83E-05                                   |
| U-236   | 2.93E-09                                   |
| U-238   | 1.40E-03                                   |

## Haz. Waste No(s).

F001, F002, F005,  
F006, F007, F009,  
P030, P098, P099,  
P106, U003, U103,  
U108

## TRUCON Code(s)

127/227

## Waste Stream Description

N/A

Waste Stream ID: **RF107.07-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3190                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                   |                   |             |
|-----------------------------------|-------------------|-------------|
| Container Type                    | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner       | WP-RF107.07       | 57.0        |
| SWB w/ 4 - 55-gal Drums w/ Liners | WP-RF107.07       | 1.9         |
| <b>Shipped Total</b>              |                   | <b>58.9</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 0.00                                 |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 3.51                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 1172.21                              |
| Organic Matrix               | 4.62                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.72E+00                                   |
| Am-243  | 2.88E-05                                   |
| Np-237  | 4.01E-05                                   |
| Pu-238  | 6.29E-01                                   |
| Pu-239  | 1.23E+01                                   |
| Pu-240  | 2.87E+00                                   |
| Pu-241  | 6.98E+01                                   |
| Pu-242  | 3.79E-04                                   |
| Th-229  | 3.11E-14                                   |
| Th-230  | 4.17E-08                                   |
| Th-232  | 8.40E-18                                   |
| U-233   | 3.36E-10                                   |
| U-234   | 2.32E-03                                   |
| U-235   | 7.51E-05                                   |
| U-236   | 1.70E-07                                   |
| U-238   | 3.74E-05                                   |

## Haz. Waste No(s).

F001, F002, F005,  
F006, F007, F009,  
P030, P098, P099,  
P106, U003, U103,  
U108

## TRUCON Code(s)

111/211, 113/213,  
126/226

## Waste Stream Description

N/A

Waste Stream ID: **RF110.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Filter          | Waste Matrix Code | S5410      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |            |
|------------------------------|-------------------|------------|
| Container Type               | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner  | WP-RF110.01       | 8.3        |
| 55-gal Drum Dir Ld w/o Liner | WP-RF110.01       | 0.6        |
| 55-gal POC - 12" w/ Liner    | WP-RF110.01       | 0.2        |
| <b>Shipped Total</b>         |                   | <b>9.2</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 4.57                                 |
| Aluminum-based Metals/Alloys | 5.49                                 |
| Other Metals                 | 0.08                                 |
| Other Inorganic Materials    | 9.72                                 |
| Cellulosics                  | 50.40                                |
| Rubber                       | 4.90                                 |
| Plastics                     | 26.12                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.07                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.06E+00                                   |
| Am-243  | 1.88E-04                                   |
| Np-237  | 2.42E-05                                   |
| Pu-238  | 6.81E-01                                   |
| Pu-239  | 1.37E+01                                   |
| Pu-240  | 3.20E+00                                   |
| Pu-241  | 5.77E+01                                   |
| Pu-242  | 7.16E-04                                   |
| Th-229  | 5.80E-14                                   |
| Th-230  | 3.58E-09                                   |
| Th-232  | 3.75E-17                                   |
| U-233   | 3.34E-10                                   |
| U-234   | 1.03E-04                                   |
| U-235   | 3.32E-06                                   |
| U-236   | 3.79E-07                                   |
| U-238   | 2.12E-05                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D029, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

## TRUCON Code(s)

119/219, 130/230

## Waste Stream Description

N/A



Waste Stream ID: **RF110.05-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Filter          | Waste Matrix Code | S5410                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                    |                   |             |
|------------------------------------|-------------------|-------------|
| Container Type                     | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner        | WP-RF110.05       | 16.6        |
| 55-gal Drum Dir Ld w/o Liner       | WP-RF110.05       | 1.7         |
| SWB w/ 4 - 55-gal Drums w/ Liners  | WP-RF110.05       | 11.3        |
| SWB w/ 4 - 55-gal Drums w/o Liners | WP-RF110.05       | 1.9         |
| <b>Shipped Total</b>               |                   | <b>31.5</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 7.11                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 7.40                                 |
| Cellulosics                  | 6.35                                 |
| Rubber                       | 0.07                                 |
| Plastics                     | 17.62                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.23                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.48E+00                                   |
| Np-237  | 6.14E-06                                   |
| Pu-238  | 6.51E-01                                   |
| Pu-239  | 1.46E+01                                   |
| Pu-240  | 3.38E+00                                   |
| Pu-241  | 3.83E+01                                   |
| Pu-242  | 3.25E-04                                   |
| Th-229  | 1.79E-14                                   |
| Th-230  | 7.25E-09                                   |
| Th-232  | 6.19E-17                                   |
| U-233   | 8.99E-11                                   |
| U-234   | 1.66E-04                                   |
| U-235   | 5.12E-06                                   |
| U-236   | 5.01E-07                                   |
| U-238   | 5.28E-07                                   |

## Haz. Waste No(s).

D022, F001, F002

## TRUCON Code(s)

119/219

## Waste Stream Description

N/A

Waste Stream ID: **RF113.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |            |                         |                    |
|-------------|---|-----------------------|---------------------|-------------------|------------|-------------------------|--------------------|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Organics | Waste Matrix Code | S3114      | Handling                | CH                 |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006 | Activity Concentrations | Decayed to CY 2006 |
| Stream Name | N/A                                       |                       |                     |                   |            |                         |                    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |            |
|-----------------------------|-------------------|------------|
| Container Type              | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner | WP-RF113.01       | 0.4        |
| <b>Shipped Total</b>        |                   | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 108.89                               |
| Cellulosics                  | 0.48                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 12.02                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.35E-01                                   |
| Np-237  | 2.36E-06                                   |
| Pu-238  | 4.40E-02                                   |
| Pu-239  | 8.91E-01                                   |
| Pu-240  | 2.07E-01                                   |
| Pu-241  | 4.53E+00                                   |
| Pu-242  | 2.71E-05                                   |
| Th-229  | 7.17E-15                                   |
| Th-230  | 9.17E-12                                   |
| Th-232  | 2.42E-18                                   |
| U-233   | 3.87E-11                                   |
| U-234   | 5.07E-07                                   |
| U-235   | 3.51E-09                                   |
| U-236   | 2.45E-08                                   |
| U-238   | 1.64E-14                                   |

## Haz. Waste No(s).

D007, D010, F005

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **RF115.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5123                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                    |                   |              |
|------------------------------------|-------------------|--------------|
| Container Type                     | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner        | WP-RF115.01       | 17.3         |
| 55-gal Drum Dir Ld w/o Liner       | WP-RF115.01       | 1.5          |
| 55-gal POC - 12" w/ Liner          | WP-RF115.01       | 86.7         |
| SWB w/ 4 - 55-gal Drums w/ Liners  | WP-RF115.01       | 5.7          |
| SWB w/ 4 - 55-gal Drums w/o Liners | WP-RF115.01       | 3.8          |
| <b>Shipped Total</b>               |                   | <b>114.9</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 16.78                                |
| Aluminum-based Metals/Alloys | 0.01                                 |
| Other Metals                 | 11.65                                |
| Other Inorganic Materials    | 53.37                                |
| Cellulosics                  | 2.41                                 |
| Rubber                       | 0.01                                 |
| Plastics                     | 3.38                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.01                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.09E+00                                   |
| Np-237  | 1.40E-05                                   |
| Pu-238  | 9.12E-01                                   |
| Pu-239  | 2.20E+01                                   |
| Pu-240  | 5.13E+00                                   |
| Pu-241  | 4.56E+01                                   |
| Pu-242  | 4.30E-04                                   |
| Th-229  | 3.35E-14                                   |
| Th-230  | 4.43E-10                                   |
| Th-232  | 6.01E-17                                   |
| U-233   | 1.93E-10                                   |
| U-234   | 1.75E-05                                   |
| U-235   | 3.61E-07                                   |
| U-236   | 6.08E-07                                   |
| U-238   | 5.44E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F005

## TRUCON Code(s)

122/222

## Waste Stream Description

N/A

Waste Stream ID: **RF116.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3119                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes           |                   |            |
|---------------------------|-------------------|------------|
| Container Type            | Ref. Waste Stream | Volume     |
| 55-gal POC - 12" w/ Liner | WP-RF116.01       | 4.0        |
| <b>Shipped Total</b>      |                   | <b>4.0</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 19.23                                |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 16.09                                |
| Other Inorganic Materials    | 32.79                                |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 3.23                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.40E+00                                   |
| Np-237  | 3.44E-05                                   |
| Pu-238  | 6.49E-01                                   |
| Pu-239  | 2.48E+01                                   |
| Pu-240  | 5.75E+00                                   |
| Pu-241  | 3.32E+01                                   |
| Pu-242  | 3.84E-04                                   |
| Th-229  | 9.48E-14                                   |
| Th-230  | 1.35E-10                                   |
| Th-232  | 6.74E-17                                   |
| U-233   | 5.25E-10                                   |
| U-234   | 7.49E-06                                   |
| U-235   | 9.78E-08                                   |
| U-236   | 6.82E-07                                   |
| U-238   | 2.32E-13                                   |

## Haz. Waste No(s).

D004, D005, D006,  
D007, D008, D009,  
D010, D011, F001,  
F002, F005

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A

Waste Stream ID: **RF117.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |            |                                       |      |
|-------------|---|-----------------------|---------------------|-------------------|------------|---------------------------------------|------|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5123      | Handling                              | CH   |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006 | Activity Concentrations Decayed to CY | 2006 |
| Stream Name | N/A                                       |                       |                     |                   |            |                                       |      |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |            |
|------------------------------|-------------------|------------|
| Container Type               | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner  | WP-RF117.01       | 1.7        |
| 55-gal Drum Dir Ld w/o Liner | WP-RF117.01       | 0.2        |
| <b>Shipped Total</b>         |                   | <b>1.9</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 1.50                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 1.28                                 |
| Other Inorganic Materials    | 93.11                                |
| Cellulosics                  | 8.65                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 8.22                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.49E+00                                   |
| Np-237  | 2.11E-05                                   |
| Pu-238  | 6.59E-01                                   |
| Pu-239  | 1.31E+01                                   |
| Pu-240  | 3.04E+00                                   |
| Pu-241  | 6.81E+01                                   |
| Pu-242  | 3.90E-04                                   |
| Th-229  | 3.60E-14                                   |
| Th-230  | 2.11E-08                                   |
| Th-232  | 2.01E-17                                   |
| U-233   | 2.61E-10                                   |
| U-234   | 7.86E-04                                   |
| U-235   | 2.51E-05                                   |
| U-236   | 2.71E-07                                   |
| U-238   | 2.22E-07                                   |

## Haz. Waste No(s).

D007

## TRUCON Code(s)

122/222

## Waste Stream Description

N/A

Waste Stream ID: **RF118.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3111                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |               |
|-----------------------------|-------------------|---------------|
| Container Type              | Ref. Waste Stream | Volume        |
| 55-gal Drum Dir Ld w/ Liner | WP-RF118.01       | 1.0           |
| 55-gal POC - 12" w/ Liner   | WP-RF118.01       | 1431.0        |
| 55-gal POC - 12" w/o Liner  | WP-RF118.01       | 0.2           |
| <b>Shipped Total</b>        |                   | <b>1432.3</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 11.29                                |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 1.26                                 |
| Other Inorganic Materials    | 16.19                                |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 1.32                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.97E+00                                   |
| Am-243  | 8.75E-07                                   |
| Np-237  | 5.40E-05                                   |
| Pu-238  | 2.92E+00                                   |
| Pu-239  | 4.66E+01                                   |
| Pu-240  | 1.25E+01                                   |
| Pu-241  | 1.44E+02                                   |
| Pu-242  | 1.52E-03                                   |
| Th-229  | 3.12E-13                                   |
| Th-230  | 1.18E-08                                   |
| Th-232  | 3.31E-16                                   |
| U-233   | 1.18E-09                                   |
| U-234   | 2.44E-04                                   |
| U-235   | 6.48E-06                                   |
| U-236   | 2.23E-06                                   |
| U-238   | 1.40E-07                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F005

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A

Waste Stream ID: **RF119.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3129                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | WP-RF119.01       | 19.3        |
| 55-gal Drum Dir Ld w/o Liner | WP-RF119.01       | 3.7         |
| 55-gal POC - 12" w/ Liner    | WP-RF119.01       | 1.0         |
| <b>Shipped Total</b>         |                   | <b>24.1</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 57.80                                |
| Aluminum-based Metals/Alloys | 0.02                                 |
| Other Metals                 | 0.85                                 |
| Other Inorganic Materials    | 8.24                                 |
| Cellulosics                  | 0.30                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 15.73                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 245.52                               |
| Organic Matrix               | 1.90                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.42E+00                                   |
| Np-237  | 1.11E-05                                   |
| Pu-238  | 3.09E-01                                   |
| Pu-239  | 6.09E+00                                   |
| Pu-240  | 1.44E+00                                   |
| Pu-241  | 3.29E+01                                   |
| Pu-242  | 1.85E-04                                   |
| Th-229  | 8.58E-15                                   |
| Th-230  | 3.67E-10                                   |
| Th-232  | 4.20E-18                                   |
| U-233   | 9.27E-11                                   |
| U-234   | 2.13E-05                                   |
| U-235   | 7.22E-07                                   |
| U-236   | 8.52E-08                                   |
| U-238   | 8.83E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F005

## TRUCON Code(s)

111/211, 127/227

## Waste Stream Description

N/A

Waste Stream ID: **RF121.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5129                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes           |                   |             |
|---------------------------|-------------------|-------------|
| Container Type            | Ref. Waste Stream | Volume      |
| 55-gal POC - 12" w/ Liner | WP-RF121.01       | 46.0        |
| <b>Shipped Total</b>      |                   | <b>46.0</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 5.55                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 6.66                                 |
| Other Inorganic Materials    | 11.10                                |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 1.33                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.07E+00                                   |
| Np-237  | 5.66E-06                                   |
| Pu-238  | 1.40E+00                                   |
| Pu-239  | 4.29E+01                                   |
| Pu-240  | 1.03E+01                                   |
| Pu-241  | 7.13E+01                                   |
| Pu-242  | 6.64E-04                                   |
| Th-229  | 4.53E-15                                   |
| Th-230  | 5.36E-10                                   |
| Th-232  | 6.77E-17                                   |
| U-233   | 4.26E-11                                   |
| U-234   | 2.59E-05                                   |
| U-235   | 5.71E-07                                   |
| U-236   | 9.14E-07                                   |
| U-238   | 3.94E-09                                   |

## Haz. Waste No(s).

D007, D008

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A



Waste Stream ID: **RF122.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3129                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | WP-RF122.01       | 0.2         |
| 55-gal Drum Dir Ld w/o Liner | WP-RF122.01       | 1.5         |
| 55-gal POC - 12" w/ Liner    | WP-RF122.01       | 33.9        |
| <b>Shipped Total</b>         |                   | <b>35.6</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 10.47                                |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 12.08                                |
| Other Inorganic Materials    | 21.10                                |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 2.56                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.68E+00                                   |
| Np-237  | 1.59E-03                                   |
| Pu-238  | 1.77E+00                                   |
| Pu-239  | 3.86E+01                                   |
| Pu-240  | 9.29E+00                                   |
| Pu-241  | 8.10E+01                                   |
| Pu-242  | 9.78E-04                                   |
| Th-229  | 5.04E-12                                   |
| Th-230  | 3.69E-10                                   |
| Th-232  | 1.09E-16                                   |
| U-233   | 2.69E-08                                   |
| U-234   | 2.04E-05                                   |
| U-235   | 1.52E-07                                   |
| U-236   | 1.10E-06                                   |
| U-238   | 5.91E-13                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, F001, F002,  
F005

## TRUCON Code(s)

111/211

## Waste Stream Description

N/A

Waste Stream ID: **RF122.03-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3129                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |            |
|-----------------------------|-------------------|------------|
| Container Type              | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner | WP-RF122.03       | 4.4        |
| <b>Shipped Total</b>        |                   | <b>4.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 424.32                               |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 6.64                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 163.06                               |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.60E+00                                   |
| Np-237  | 9.06E-05                                   |
| Pu-238  | 1.62E-01                                   |
| Pu-239  | 3.25E+00                                   |
| Pu-240  | 7.54E-01                                   |
| Pu-241  | 1.81E+01                                   |
| Pu-242  | 9.85E-05                                   |
| Th-229  | 7.14E-14                                   |
| Th-230  | 3.72E-08                                   |
| Th-232  | 2.21E-18                                   |
| U-233   | 7.69E-10                                   |
| U-234   | 2.07E-03                                   |
| U-235   | 1.39E-04                                   |
| U-236   | 4.47E-08                                   |
| U-238   | 7.77E-03                                   |

## Haz. Waste No(s).

D004, D005, D009, D010, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

111/211

## Waste Stream Description

N/A

Waste Stream ID: **RF122.04-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3129                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | WP-RF122.04       | 54.1        |
| <b>Shipped Total</b>        |                   | <b>54.1</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 662.72                               |
| Cellulosics                  | 0.28                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 8.45                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 1.50                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.71E+00                                   |
| Np-237  | 6.70E-05                                   |
| Pu-238  | 1.49E-01                                   |
| Pu-239  | 2.98E+00                                   |
| Pu-240  | 6.92E-01                                   |
| Pu-241  | 1.67E+01                                   |
| Pu-242  | 9.06E-05                                   |
| Th-229  | 5.28E-14                                   |
| Th-230  | 1.10E-08                                   |
| Th-232  | 2.03E-18                                   |
| U-233   | 5.68E-10                                   |
| U-234   | 6.12E-04                                   |
| U-235   | 6.47E-05                                   |
| U-236   | 4.10E-08                                   |
| U-238   | 4.33E-03                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D011

## TRUCON Code(s)

111/211, 127/227

## Waste Stream Description

N/A

Waste Stream ID: **RF122.05-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3129                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | WP-RF122.05       | 16.2        |
| <b>Shipped Total</b>        |                   | <b>16.2</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.15                                 |
| Other Inorganic Materials    | 519.58                               |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 49.09                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.78E-01                                   |
| Np-237  | 7.74E-07                                   |
| Pu-238  | 1.70E-02                                   |
| Pu-239  | 3.37E-01                                   |
| Pu-240  | 7.83E-02                                   |
| Pu-241  | 1.90E+00                                   |
| Pu-242  | 1.03E-05                                   |
| Th-229  | 5.71E-16                                   |
| Th-230  | 2.23E-08                                   |
| Th-232  | 2.29E-19                                   |
| U-233   | 6.25E-12                                   |
| U-234   | 1.24E-03                                   |
| U-235   | 6.46E-05                                   |
| U-236   | 4.64E-09                                   |
| U-238   | 2.40E-03                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D011, F001,  
F002, F005, F006,  
F007, F009

## TRUCON Code(s)

111/211, 112/212,  
127/227

## Waste Stream Description

N/A

Waste Stream ID: **RF122.06-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3129                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |            |
|-----------------------------|-------------------|------------|
| Container Type              | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner | WP-RF122.06       | 0.4        |
| 55-gal POC - 12" w/ Liner   | WP-RF122.06       | 6.9        |
| <b>Shipped Total</b>        |                   | <b>7.3</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 9.30                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 12.03                                |
| Other Inorganic Materials    | 48.94                                |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 2.65                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.70E+00                                   |
| Np-237  | 5.39E-05                                   |
| Pu-238  | 1.38E+00                                   |
| Pu-239  | 3.47E+01                                   |
| Pu-240  | 8.19E+00                                   |
| Pu-241  | 7.15E+01                                   |
| Pu-242  | 8.75E-04                                   |
| Th-229  | 1.51E-13                                   |
| Th-230  | 1.87E-09                                   |
| Th-232  | 9.60E-17                                   |
| U-233   | 8.32E-10                                   |
| U-234   | 5.99E-05                                   |
| U-235   | 1.91E-06                                   |
| U-236   | 9.72E-07                                   |
| U-238   | 3.86E-05                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D011

## TRUCON Code(s)

111/211

## Waste Stream Description

N/A

Waste Stream ID: **RF123.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3119                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                   |                   |            |
|-----------------------------------|-------------------|------------|
| Container Type                    | Ref. Waste Stream | Volume     |
| 55-gal POC - 12" w/ Liner         | WP-RF123.01       | 7.5        |
| SWB w/ 4 - 55-gal Drums w/ Liners | WP-RF123.01       | 1.9        |
| <b>Shipped Total</b>              |                   | <b>9.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 5.09                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 5.89                                 |
| Other Inorganic Materials    | 9.14                                 |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 1.18                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.64E+00                                   |
| Np-237  | 1.54E-05                                   |
| Pu-238  | 1.08E+00                                   |
| Pu-239  | 3.23E+01                                   |
| Pu-240  | 7.51E+00                                   |
| Pu-241  | 6.91E+01                                   |
| Pu-242  | 5.30E-04                                   |
| Th-229  | 3.12E-14                                   |
| Th-230  | 1.55E-09                                   |
| Th-232  | 8.80E-17                                   |
| U-233   | 1.90E-10                                   |
| U-234   | 4.92E-05                                   |
| U-235   | 1.54E-06                                   |
| U-236   | 8.91E-07                                   |
| U-238   | 1.06E-08                                   |

## Haz. Waste No(s).

D006, D007, D008, D009, D018, D019, D022, D028, D029, D043, F001, F002, F005

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A

Waste Stream ID: **RF123.02-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3119                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |            |
|------------------------------|-------------------|------------|
| Container Type               | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner  | WP-RF123.02       | 0.6        |
| 55-gal Drum Dir Ld w/o Liner | WP-RF123.02       | 0.2        |
| <b>Shipped Total</b>         |                   | <b>0.8</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 29.16                                |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 128.43                               |
| Cellulosics                  | 6.49                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 2.51                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.67E-02                                   |
| Np-237  | 1.03E-08                                   |
| Pu-238  | 5.08E-03                                   |
| Pu-239  | 9.99E-02                                   |
| Pu-240  | 2.33E-02                                   |
| Pu-241  | 5.65E-01                                   |
| Pu-242  | 3.07E-06                                   |
| Th-229  | 2.72E-18                                   |
| Th-230  | 5.05E-09                                   |
| Th-232  | 6.81E-20                                   |
| U-233   | 4.39E-14                                   |
| U-234   | 2.81E-04                                   |
| U-235   | 3.24E-05                                   |
| U-236   | 1.38E-09                                   |
| U-238   | 2.52E-03                                   |

## Haz. Waste No(s).

D010, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

122/222

## Waste Stream Description

N/A

Waste Stream ID: **RF123.03-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3119                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | WP-RF123.03       | 11.9        |
| 55-gal Drum Dir Ld w/o Liner | WP-RF123.03       | 0.2         |
| <b>Shipped Total</b>         |                   | <b>12.1</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 5.34                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 25.98                                |
| Cellulosics                  | 11.41                                |
| Rubber                       | 0.00                                 |
| Plastics                     | 2.72                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.96                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.47E+01                                   |
| Np-237  | 2.08E-04                                   |
| Pu-238  | 8.59E-01                                   |
| Pu-239  | 1.71E+01                                   |
| Pu-240  | 3.97E+00                                   |
| Pu-241  | 9.17E+01                                   |
| Pu-242  | 5.23E-04                                   |
| Th-229  | 3.54E-13                                   |
| Th-230  | 4.67E-10                                   |
| Th-232  | 2.62E-17                                   |
| U-233   | 2.57E-09                                   |
| U-234   | 2.10E-05                                   |
| U-235   | 1.62E-06                                   |
| U-236   | 3.53E-07                                   |
| U-238   | 1.22E-04                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A



Waste Stream ID: **RF123.04-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3119                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | WP-RF123.04       | 44.5        |
| <b>Shipped Total</b>        |                   | <b>44.5</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.39                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.01                                 |
| Other Inorganic Materials    | 17.76                                |
| Cellulosics                  | 1.10                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 0.27                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.76                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.96E+00                                   |
| Np-237  | 2.14E-05                                   |
| Pu-238  | 9.18E-01                                   |
| Pu-239  | 1.81E+01                                   |
| Pu-240  | 4.23E+00                                   |
| Pu-241  | 9.80E+01                                   |
| Pu-242  | 5.59E-04                                   |
| Th-229  | 3.61E-14                                   |
| Th-230  | 5.89E-10                                   |
| Th-232  | 2.79E-17                                   |
| U-233   | 2.62E-10                                   |
| U-234   | 2.58E-05                                   |
| U-235   | 6.84E-07                                   |
| U-236   | 3.76E-07                                   |
| U-238   | 5.86E-06                                   |

## Haz. Waste No(s).

D007, D008, F005

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A

Waste Stream ID: **RF124.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5311                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | WP-RF124.01       | 91.5        |
| 55-gal Drum Dir Ld w/o Liner | WP-RF124.01       | 0.8         |
| SWB Dir Ld w/o Liner         | WP-RF124.01       | 1.9         |
| <b>Shipped Total</b>         |                   | <b>94.2</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.02                                 |
| Aluminum-based Metals/Alloys | 0.01                                 |
| Other Metals                 | 223.31                               |
| Other Inorganic Materials    | 0.82                                 |
| Cellulosics                  | 0.75                                 |
| Rubber                       | 129.33                               |
| Plastics                     | 8.27                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.00E-01                                   |
| Am-243  | 4.78E-08                                   |
| Np-237  | 1.54E-05                                   |
| Pu-238  | 1.20E-01                                   |
| Pu-239  | 2.62E+00                                   |
| Pu-240  | 6.04E-01                                   |
| Pu-241  | 1.14E+01                                   |
| Pu-242  | 6.99E-05                                   |
| Th-229  | 7.45E-14                                   |
| Th-230  | 3.38E-09                                   |
| Th-232  | 1.11E-17                                   |
| U-233   | 3.20E-10                                   |
| U-234   | 7.60E-05                                   |
| U-235   | 1.33E-06                                   |
| U-236   | 8.95E-08                                   |
| U-238   | 1.51E-06                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

116/216, 123/223

## Waste Stream Description

N/A

Waste Stream ID: **RF124.02-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5311                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | WP-RF124.02       | 13.1        |
| 55-gal Drum Dir Ld w/o Liner | WP-RF124.02       | 0.2         |
| <b>Shipped Total</b>         |                   | <b>13.3</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.26                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 207.17                               |
| Other Inorganic Materials    | 2.78                                 |
| Cellulosics                  | 0.98                                 |
| Rubber                       | 123.26                               |
| Plastics                     | 8.93                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.07E-01                                   |
| Np-237  | 1.06E-05                                   |
| Pu-238  | 2.41E-01                                   |
| Pu-239  | 5.01E+00                                   |
| Pu-240  | 1.15E+00                                   |
| Pu-241  | 2.23E+01                                   |
| Pu-242  | 1.38E-04                                   |
| Th-229  | 4.82E-14                                   |
| Th-230  | 1.12E-09                                   |
| Th-232  | 2.10E-17                                   |
| U-233   | 2.10E-10                                   |
| U-234   | 2.66E-05                                   |
| U-235   | 7.69E-07                                   |
| U-236   | 1.70E-07                                   |
| U-238   | 6.59E-09                                   |

## Haz. Waste No(s).

D008, D022, D028,  
F001, F002

## TRUCON Code(s)

123/223

## Waste Stream Description

N/A

Waste Stream ID: **RF125.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Organics | Waste Matrix Code | S3900                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                   |                   |             |
|-----------------------------------|-------------------|-------------|
| Container Type                    | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner       | WP-RF125.01       | 3.3         |
| 55-gal Drum Dir Ld w/o Liner      | WP-RF125.01       | 1.0         |
| 55-gal POC - 12" w/ Liner         | WP-RF125.01       | 6.2         |
| SWB w/ 4 - 55-gal Drums w/ Liners | WP-RF125.01       | 3.8         |
| <b>Shipped Total</b>              |                   | <b>14.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 10.07                                |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 2.84                                 |
| Other Inorganic Materials    | 2.40                                 |
| Cellulosics                  | 0.76                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 1.35                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 11.23                                |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.53E+01                                   |
| Np-237  | 3.13E-04                                   |
| Pu-238  | 1.08E+00                                   |
| Pu-239  | 2.69E+01                                   |
| Pu-240  | 6.22E+00                                   |
| Pu-241  | 7.80E+01                                   |
| Pu-242  | 5.32E-04                                   |
| Th-229  | 5.58E-13                                   |
| Th-230  | 1.65E-08                                   |
| Th-232  | 4.10E-17                                   |
| U-233   | 4.00E-09                                   |
| U-234   | 6.16E-04                                   |
| U-235   | 2.00E-05                                   |
| U-236   | 5.53E-07                                   |
| U-238   | 4.37E-05                                   |

## Haz. Waste No(s).

D004, D005, D009, D010, D022, D027, D028, D029, D032, D033, D034, D043, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **RF126.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Organics | Waste Matrix Code | S3229                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes           |                   |            |
|---------------------------|-------------------|------------|
| Container Type            | Ref. Waste Stream | Volume     |
| 55-gal POC - 12" w/ Liner | WP-RF126.01       | 1.0        |
| <b>Shipped Total</b>      |                   | <b>1.0</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 8.65                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 11.54                                |
| Other Inorganic Materials    | 0.00                                 |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 2.31                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 13.94                                |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.16E+00                                   |
| Np-237  | 3.84E-06                                   |
| Pu-238  | 1.46E+00                                   |
| Pu-239  | 3.73E+01                                   |
| Pu-240  | 8.35E+00                                   |
| Pu-241  | 8.55E+01                                   |
| Pu-242  | 5.23E-04                                   |
| Th-229  | 2.29E-15                                   |
| Th-230  | 1.21E-09                                   |
| Th-232  | 5.50E-17                                   |
| U-233   | 2.47E-11                                   |
| U-234   | 5.10E-05                                   |
| U-235   | 1.35E-06                                   |
| U-236   | 7.43E-07                                   |
| U-238   | 1.10E-08                                   |

## Haz. Waste No(s).

D007

## TRUCON Code(s)

126/226

## Waste Stream Description

N/A

Waste Stream ID: **RF126.04-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Organics | Waste Matrix Code | S3229                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes           |                   |            |
|---------------------------|-------------------|------------|
| Container Type            | Ref. Waste Stream | Volume     |
| 55-gal POC - 12" w/ Liner | WP-RF126.04       | 2.1        |
| <b>Shipped Total</b>      |                   | <b>2.1</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 6.06                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 8.08                                 |
| Other Inorganic Materials    | 0.00                                 |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 1.62                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 11.15                                |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.29E+00                                   |
| Np-237  | 4.98E-06                                   |
| Pu-238  | 1.21E+00                                   |
| Pu-239  | 3.40E+01                                   |
| Pu-240  | 7.85E+00                                   |
| Pu-241  | 7.25E+01                                   |
| Pu-242  | 6.09E-04                                   |
| Th-229  | 3.00E-15                                   |
| Th-230  | 1.82E-09                                   |
| Th-232  | 5.17E-17                                   |
| U-233   | 3.22E-11                                   |
| U-234   | 7.27E-05                                   |
| U-235   | 1.73E-06                                   |
| U-236   | 6.98E-07                                   |
| U-238   | 1.51E-08                                   |

## Haz. Waste No(s).

D007, D008, F001,  
F002

## TRUCON Code(s)

126/226

## Waste Stream Description

N/A

Waste Stream ID: **RF128.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3119                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes           |                   |              |
|---------------------------|-------------------|--------------|
| Container Type            | Ref. Waste Stream | Volume       |
| 55-gal POC - 12" w/ Liner | WP-RF128.01       | 198.2        |
| <b>Shipped Total</b>      |                   | <b>198.2</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 4.71                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 5.88                                 |
| Other Inorganic Materials    | 9.14                                 |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 1.18                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.75E+00                                   |
| Np-237  | 1.83E-05                                   |
| Pu-238  | 1.90E+00                                   |
| Pu-239  | 4.29E+01                                   |
| Pu-240  | 1.04E+01                                   |
| Pu-241  | 9.42E+01                                   |
| Pu-242  | 7.61E-04                                   |
| Th-229  | 6.75E-14                                   |
| Th-230  | 6.47E-10                                   |
| Th-232  | 1.90E-16                                   |
| U-233   | 3.13E-10                                   |
| U-234   | 2.81E-05                                   |
| U-235   | 2.28E-07                                   |
| U-236   | 1.54E-06                                   |
| U-238   | 1.47E-10                                   |

## Haz. Waste No(s).

D005, D006, D007,  
D008, D010, D011

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A

Waste Stream ID: **RF129.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |              |
|------------------------------|-------------------|--------------|
| Container Type               | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner  | WP-RF129.01       | 8.3          |
| 55-gal Drum Dir Ld w/o Liner | WP-RF129.01       | 0.6          |
| 55-gal POC - 12" w/ Liner    | WP-RF129.01       | 3.3          |
| SWB Dir Ld w/o Liner         | WP-RF129.01       | 455.5        |
| <b>Shipped Total</b>         |                   | <b>467.8</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 151.84                               |
| Aluminum-based Metals/Alloys | 1.45                                 |
| Other Metals                 | 23.51                                |
| Other Inorganic Materials    | 20.31                                |
| Cellulosics                  | 14.40                                |
| Rubber                       | 2.70                                 |
| Plastics                     | 26.27                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.22                                 |
| Organic Matrix               | 0.61                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.40E-01                                   |
| Am-243  | 2.19E-07                                   |
| Cs-137  | 2.28E-07                                   |
| Np-237  | 4.52E-06                                   |
| Pu-238  | 9.75E-02                                   |
| Pu-239  | 1.86E+00                                   |
| Pu-240  | 4.44E-01                                   |
| Pu-241  | 1.00E+01                                   |
| Pu-242  | 5.81E-05                                   |
| Pu-244  | 9.20E-24                                   |
| Th-229  | 7.69E-15                                   |
| Th-230  | 2.25E-09                                   |
| Th-232  | 2.93E-18                                   |
| U-233   | 5.58E-11                                   |
| U-234   | 8.39E-05                                   |
| U-235   | 2.93E-06                                   |
| U-236   | 3.95E-08                                   |
| U-238   | 1.33E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D029, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A



Waste Stream ID: **RF129.05-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes              |                   |              |
|------------------------------|-------------------|--------------|
| Container Type               | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner  | WP-RF129.05       | 2.1          |
| 55-gal Drum Dir Ld w/o Liner | WP-RF129.05       | 0.2          |
| SWB Dir Ld w/o Liner         | WP-RF129.05       | 446.0        |
| <b>Shipped Total</b>         |                   | <b>448.3</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 182.14                               |
| Aluminum-based Metals/Alloys | 0.66                                 |
| Other Metals                 | 61.87                                |
| Other Inorganic Materials    | 6.36                                 |
| Cellulosics                  | 8.09                                 |
| Rubber                       | 2.72                                 |
| Plastics                     | 22.28                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.26                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.43E-01                                   |
| Am-243  | 7.64E-07                                   |
| Np-237  | 2.23E-05                                   |
| Pu-238  | 9.17E-02                                   |
| Pu-239  | 1.68E+00                                   |
| Pu-240  | 4.05E-01                                   |
| Pu-241  | 9.67E+00                                   |
| Pu-242  | 5.51E-05                                   |
| Th-229  | 4.02E-14                                   |
| Th-230  | 3.56E-10                                   |
| Th-232  | 2.67E-18                                   |
| U-233   | 2.87E-10                                   |
| U-234   | 1.36E-05                                   |
| U-235   | 4.19E-07                                   |
| U-236   | 3.60E-08                                   |
| U-238   | 1.41E-07                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **RF130.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5490                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                   |                   |             |
|-----------------------------------|-------------------|-------------|
| Container Type                    | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner       | WP-RF130.01       | 25.4        |
| 55-gal Drum Dir Ld w/o Liner      | WP-RF130.01       | 1.9         |
| SWB w/ 4 - 55-gal Drums w/ Liners | WP-RF130.01       | 11.3        |
| <b>Shipped Total</b>              |                   | <b>38.6</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 13.34                                |
| Aluminum-based Metals/Alloys | 1.41                                 |
| Other Metals                 | 6.65                                 |
| Other Inorganic Materials    | 8.05                                 |
| Cellulosics                  | 0.81                                 |
| Rubber                       | 0.13                                 |
| Plastics                     | 7.57                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 2.91                                 |
| Organic Matrix               | 7.06                                 |
| Soils/gravel                 | 0.03                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.16E+00                                   |
| Cm-244  | 3.61E-09                                   |
| Cs-137  | 1.78E-05                                   |
| Np-237  | 2.10E-04                                   |
| Pu-238  | 6.50E-01                                   |
| Pu-239  | 1.28E+01                                   |
| Pu-240  | 2.99E+00                                   |
| Pu-241  | 6.94E+01                                   |
| Pu-242  | 3.95E-04                                   |
| Pu-244  | 4.41E-18                                   |
| Sr-90   | 8.66E-04                                   |
| Th-229  | 3.78E-13                                   |
| Th-230  | 1.28E-07                                   |
| Th-232  | 1.18E-10                                   |
| U-233   | 2.70E-09                                   |
| U-234   | 1.05E-03                                   |
| U-235   | 4.10E-05                                   |
| U-236   | 2.66E-07                                   |
| U-238   | 5.93E-05                                   |

## Haz. Waste No(s).

D004, D005, D008, D009, D010, D022, D027, D028, D029, D032, D033, D034, D043, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **RF134.02-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |            |                                       |      |
|-------------|---|-----------------------|-----------------|-------------------|------------|---------------------------------------|------|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Soils           | Waste Matrix Code | S4200      | Handling                              | CH   |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006 | Activity Concentrations Decayed to CY | 2006 |
| Stream Name | N/A                                       |                       |                 |                   |            |                                       |      |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes      |                   |             |
|----------------------|-------------------|-------------|
| Container Type       | Ref. Waste Stream | Volume      |
| SWB Dir Ld w/o Liner | WP-RF134.02       | 11.3        |
| <b>Shipped Total</b> |                   | <b>11.3</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 3.35                                 |
| Aluminum-based Metals/Alloys | 2.23                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 0.63                                 |
| Cellulosics                  | 10.66                                |
| Rubber                       | 0.00                                 |
| Plastics                     | 10.56                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 666.10                               |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.81E-02                                   |
| Np-237  | 1.65E-08                                   |
| Pu-238  | 4.08E-03                                   |
| Pu-239  | 8.16E-02                                   |
| Pu-240  | 1.90E-02                                   |
| Pu-241  | 4.37E-01                                   |
| Pu-242  | 2.49E-06                                   |
| Th-229  | 9.81E-18                                   |
| Th-230  | 4.76E-13                                   |
| Th-232  | 1.25E-19                                   |
| U-233   | 1.06E-13                                   |
| U-234   | 3.51E-08                                   |
| U-235   | 2.42E-10                                   |
| U-236   | 1.69E-09                                   |
| U-238   | 1.13E-15                                   |

## Haz. Waste No(s).

F001, F002, F005

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **RF135.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Organics | Waste Matrix Code | S3290                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |            |
|-----------------------------|-------------------|------------|
| Container Type              | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner | WP-RF135.01       | 2.3        |
| <b>Shipped Total</b>        |                   | <b>2.3</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 0.00                                 |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 5.51                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 802.10                               |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.18E+00                                   |
| Np-237  | 2.19E-05                                   |
| Pu-238  | 7.13E-02                                   |
| Pu-239  | 1.45E+00                                   |
| Pu-240  | 3.36E-01                                   |
| Pu-241  | 7.68E+00                                   |
| Pu-242  | 4.38E-05                                   |
| Th-229  | 3.76E-14                                   |
| Th-230  | 3.80E-09                                   |
| Th-232  | 2.21E-18                                   |
| U-233   | 2.72E-10                                   |
| U-234   | 1.41E-04                                   |
| U-235   | 1.63E-05                                   |
| U-236   | 2.98E-08                                   |
| U-238   | 1.26E-03                                   |

## Haz. Waste No(s).

D022, D026, D027,  
D029, D030, D032,  
D034, D036, D037,  
F001, F002

## TRUCON Code(s)

112/212

## Waste Stream Description

N/A

Waste Stream ID: **RF135.02-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Organics | Waste Matrix Code | S3290                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | WP-RF135.02       | 10.4        |
| <b>Shipped Total</b>        |                   | <b>10.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 1.82                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 0.00                                 |
| Cellulosics                  | 0.61                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 0.42                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 446.57                               |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.27E-01                                   |
| Np-237  | 1.22E-06                                   |
| Pu-238  | 2.97E-02                                   |
| Pu-239  | 5.94E-01                                   |
| Pu-240  | 1.38E-01                                   |
| Pu-241  | 3.32E+00                                   |
| Pu-242  | 1.80E-05                                   |
| Th-229  | 9.57E-16                                   |
| Th-230  | 7.12E-09                                   |
| Th-232  | 4.03E-19                                   |
| U-233   | 1.03E-11                                   |
| U-234   | 3.96E-04                                   |
| U-235   | 1.28E-05                                   |
| U-236   | 8.17E-09                                   |
| U-238   | 1.13E-07                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D026, D027, D028, D029, D030, D032, D034, D036, D043, F001, F002, F005

## TRUCON Code(s)

112/212

## Waste Stream Description

N/A

Waste Stream ID: **RF137.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3119                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |            |
|-----------------------------|-------------------|------------|
| Container Type              | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner | WP-RF137.01       | 0.4        |
| <b>Shipped Total</b>        |                   | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 29.18                                |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 240.94                               |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 1.49                                 |
| Plastics                     | 20.22                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.17E-01                                   |
| Np-237  | 8.31E-06                                   |
| Pu-238  | 7.98E-02                                   |
| Pu-239  | 1.64E+00                                   |
| Pu-240  | 3.79E-01                                   |
| Pu-241  | 8.62E+00                                   |
| Pu-242  | 4.92E-05                                   |
| Th-229  | 1.46E-14                                   |
| Th-230  | 9.31E-12                                   |
| Th-232  | 2.50E-18                                   |
| U-233   | 1.05E-10                                   |
| U-234   | 6.88E-07                                   |
| U-235   | 4.85E-09                                   |
| U-236   | 3.37E-08                                   |
| U-238   | 2.23E-14                                   |

## Haz. Waste No(s).

D007, D008

## TRUCON Code(s)

122/222

## Waste Stream Description

N/A

Waste Stream ID: **RF139.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3121                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | WP-RF139.01       | 11.6        |
| <b>Shipped Total</b>        |                   | <b>11.6</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 44.57                                |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 4.14                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 744.45                               |
| Organic Matrix               | 14.88                                |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.13E+01                                   |
| Np-237  | 2.76E-04                                   |
| Pu-238  | 1.42E-01                                   |
| Pu-239  | 2.87E+00                                   |
| Pu-240  | 6.66E-01                                   |
| Pu-241  | 1.60E+01                                   |
| Pu-242  | 8.68E-05                                   |
| Th-229  | 2.15E-13                                   |
| Th-230  | 3.78E-09                                   |
| Th-232  | 1.95E-18                                   |
| U-233   | 2.32E-09                                   |
| U-234   | 2.10E-04                                   |
| U-235   | 1.71E-05                                   |
| U-236   | 3.95E-08                                   |
| U-238   | 1.11E-03                                   |

## Haz. Waste No(s).

D004, D005, D009, D010, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

111/211

## Waste Stream Description

N/A

Waste Stream ID: **RF140.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |            |                                       |      |
|-------------|---|-----------------------|-----------------|-------------------|------------|---------------------------------------|------|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5420      | Handling                              | CH   |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006 | Activity Concentrations Decayed to CY | 2006 |
| Stream Name | N/A                                       |                       |                 |                   |            |                                       |      |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |              |
|-----------------------------|-------------------|--------------|
| Container Type              | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner | WP-RF140.01       | 4.0          |
| SWB Dir Ld w/o Liner        | WP-RF140.01       | 168.2        |
| <b>Shipped Total</b>        |                   | <b>172.2</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 149.72                               |
| Aluminum-based Metals/Alloys | 2.38                                 |
| Other Metals                 | 60.72                                |
| Other Inorganic Materials    | 47.21                                |
| Cellulosics                  | 4.14                                 |
| Rubber                       | 1.58                                 |
| Plastics                     | 5.57                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.02                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.77E-01                                   |
| Am-243  | 7.90E-08                                   |
| Np-237  | 2.35E-06                                   |
| Pu-238  | 7.87E-02                                   |
| Pu-239  | 1.44E+00                                   |
| Pu-240  | 3.49E-01                                   |
| Pu-241  | 8.28E+00                                   |
| Pu-242  | 4.72E-05                                   |
| Th-229  | 4.00E-15                                   |
| Th-230  | 2.84E-11                                   |
| Th-232  | 2.30E-18                                   |
| U-233   | 2.90E-11                                   |
| U-234   | 1.39E-06                                   |
| U-235   | 2.72E-08                                   |
| U-236   | 3.10E-08                                   |
| U-238   | 2.03E-10                                   |

## Haz. Waste No(s).

D005, D008, D009,  
D011, F001, F002,  
F005, F006, F007,  
F009

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A



Waste Stream ID: **RF141.01-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3119                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes           |                   |             |
|---------------------------|-------------------|-------------|
| Container Type            | Ref. Waste Stream | Volume      |
| 55-gal POC - 12" w/ Liner | WP-RF141.01       | 45.6        |
| <b>Shipped Total</b>      |                   | <b>45.6</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 7.30                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 8.83                                 |
| Other Inorganic Materials    | 14.35                                |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 1.77                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.01                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.64E+00                                   |
| Np-237  | 3.31E-06                                   |
| Pu-238  | 1.58E+00                                   |
| Pu-239  | 3.99E+01                                   |
| Pu-240  | 9.36E+00                                   |
| Pu-241  | 9.89E+01                                   |
| Pu-242  | 6.16E-04                                   |
| Th-229  | 1.96E-15                                   |
| Th-230  | 1.58E-07                                   |
| Th-232  | 6.17E-17                                   |
| U-233   | 2.11E-11                                   |
| U-234   | 5.86E-03                                   |
| U-235   | 1.88E-04                                   |
| U-236   | 8.33E-07                                   |
| U-238   | 1.66E-06                                   |

## Haz. Waste No(s).

D006, D007, D008

## TRUCON Code(s)

122/222, 130/230

## Waste Stream Description

N/A

Waste Stream ID: **RF141.02-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3119                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes           |                   |              |
|---------------------------|-------------------|--------------|
| Container Type            | Ref. Waste Stream | Volume       |
| 55-gal POC - 12" w/ Liner | WP-RF141.02       | 176.0        |
| <b>Shipped Total</b>      |                   | <b>176.0</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 5.27                                 |
| Aluminum-based Metals/Alloys | 0.01                                 |
| Other Metals                 | 6.35                                 |
| Other Inorganic Materials    | 11.00                                |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 1.27                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.07E+00                                   |
| Np-237  | 1.39E-03                                   |
| Pu-238  | 1.59E+00                                   |
| Pu-239  | 4.22E+01                                   |
| Pu-240  | 1.01E+01                                   |
| Pu-241  | 9.35E+01                                   |
| Pu-242  | 8.65E-04                                   |
| Th-229  | 2.54E-12                                   |
| Th-230  | 4.50E-08                                   |
| Th-232  | 6.64E-17                                   |
| U-233   | 1.81E-08                                   |
| U-234   | 1.67E-03                                   |
| U-235   | 5.36E-05                                   |
| U-236   | 8.97E-07                                   |
| U-238   | 4.73E-07                                   |

## Haz. Waste No(s).

D007, D008

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A

Waste Stream ID: **RL105-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                            | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | 105-C, 105KE, and 105-N Bldg TRU Mixed Debris      |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 8.1          | 0.0        | 8.1          |
| Box - Misc                  | 87.4         | 0.0        | 87.4         |
| Uncontained                 | 4.6          | 0.0        | 4.6          |
| Uncontained                 | 35.0         | 0.0        | 35.0         |
| <b>Current Form Total</b>   | <b>135.2</b> | <b>0.0</b> | <b>135.2</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 14.4         | 0.0        | 14.4         |
| SWB Dir Ld w/ Liner         | 143.6        | 0.0        | 143.6        |
| <b>Final Form Total</b>     | <b>158.0</b> | <b>0.0</b> | <b>158.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 692.43                               |
| Aluminum-based Metals/Alloys    | 161.34                               |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 39.73                                |
| Cellulosics                     | 20.04                                |
| Rubber                          | 4.41                                 |
| Plastics                        | 31.84                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 5.38                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 1.66                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 151.44                               |
| Packaging Material, Plastic     | 4.45                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Cs-137  | 3.07E-01                                   |
| Pu-238  | 5.22E-03                                   |
| Pu-239  | 1.85E-01                                   |
| Pu-240  | 4.17E-02                                   |
| Pu-241  | 8.39E-01                                   |
| Pu-242  | 2.50E-06                                   |
| Sr-90   | 2.85E-01                                   |
| Th-232  | 3.78E-06                                   |
| U-234   | 4.98E-02                                   |
| U-235   | 5.13E-03                                   |
| U-238   | 5.52E-05                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **RL105-03**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                            | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3000      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | NLOP sludge  | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 69.1        | 0.0        | 69.1        |
| <b>Current Form Total</b>   | <b>69.1</b> | <b>0.0</b> | <b>69.1</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 69.1        | 0.0        | 69.1        |
| <b>Final Form Total</b>     | <b>69.1</b> | <b>0.0</b> | <b>69.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 28.80                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 2.40                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 769.00                               |
| Inorganic Matrix                | 541.00                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.36E-01                                   |
| Cs-137  | 1.49E+00                                   |
| Np-237  | 7.46E-05                                   |
| Pu-238  | 4.31E-02                                   |
| Pu-239  | 2.09E-01                                   |
| Pu-240  | 1.15E-01                                   |
| Pu-241  | 5.73E+00                                   |
| Pu-242  | 5.54E-05                                   |
| Sr-90   | 2.72E-01                                   |
| U-234   | 3.91E-04                                   |
| U-235   | 1.39E-05                                   |
| U-238   | 2.95E-04                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

111/211

## Waste Stream Description

Solidified inorganic CH TRU waste generated from Facility/Equipment Operation and Maintenance activities at the Reactor facility.

Waste Stream ID: **RL105-07**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                            | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | RH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | 105-KE Bldg TRU RH Nonmixed Debris                 | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 4.6         | 0.0        | 4.6         |
| Box - Misc                  | 73.8        | 0.0        | 73.8        |
| <b>Current Form Total</b>   | <b>78.3</b> | <b>0.0</b> | <b>78.3</b> |

| Final Form Volumes                         |             |            |             |
|--|-------------|------------|-------------|
| Container Type                             | Stored      | Proj.      | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 73.0        | 0.0        | 73.0        |
| <b>Final Form Total</b>                    | <b>73.0</b> | <b>0.0</b> | <b>73.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 692.43                               |
| Aluminum-based Metals/Alloys    | 161.34                               |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 39.73                                |
| Cellulosics                     | 20.04                                |
| Rubber                          | 4.41                                 |
| Plastics                        | 31.84                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 5.38                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 1.66                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.12E-01                                   |
| Am-243  | 2.46E-06                                   |
| Cm-244  | 6.62E-02                                   |
| Cs-137  | 1.05E+00                                   |
| Np-237  | 5.26E-05                                   |
| Pu-238  | 3.43E-02                                   |
| Pu-239  | 1.59E-01                                   |
| Pu-240  | 8.76E-02                                   |
| Pu-241  | 4.28E+00                                   |
| Pu-242  | 3.61E-05                                   |
| Sr-90   | 3.96E-01                                   |
| Th-229  | 2.81E-13                                   |
| Th-230  | 3.19E-09                                   |
| Th-232  | 3.25E-06                                   |
| U-233   | 3.11E-09                                   |
| U-234   | 3.55E-04                                   |
| U-235   | 1.34E-05                                   |
| U-236   | 5.03E-05                                   |
| U-238   | 2.89E-04                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

The waste stream ranges from contaminated clothing to process equipment.

The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the REACTOR FACILITY.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **RL105-09**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                       |                                       |            |          |    |
|-------------|--|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                            | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3100      | Handling | RH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | 105KE TRU RH mixed solidified inorganics           |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |              |            |              |
|---------------------------|--------------|------------|--------------|
| Container Type            | Stored       | Proj.      | Total        |
| Uncontained               | 367.1        | 0.0        | 367.1        |
| <b>Current Form Total</b> | <b>367.1</b> | <b>0.0</b> | <b>367.1</b> |

| Final Form Volumes                         |              |            |              |
|--|--------------|------------|--------------|
| Container Type                             | Stored       | Proj.      | Total        |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 518.9        | 0.0        | 518.9        |
| <b>Final Form Total</b>                    | <b>518.9</b> | <b>0.0</b> | <b>518.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 212.02                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 7.91                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 778.27                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.50E+00                                   |
| Cs-137  | 9.90E-01                                   |
| Np-237  | 5.73E-06                                   |
| Pu-238  | 8.87E-01                                   |
| Pu-239  | 7.10E-03                                   |
| Pu-240  | 1.27E-02                                   |
| Pu-241  | 2.26E+02                                   |
| Sr-90   | 1.01E+00                                   |
| Th-229  | 8.17E-15                                   |
| Th-230  | 2.90E-10                                   |
| Th-232  | 2.32E-19                                   |
| U-233   | 5.52E-11                                   |
| U-234   | 1.28E-05                                   |
| U-235   | 3.50E-11                                   |
| U-236   | 1.88E-09                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

311

## Waste Stream Description

The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the REACTOR FACILITY.

Waste Stream ID: **RL200-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                |                       |                 |                                       |            |          |    |
|-------------|--------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site        | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | Other/Multiple Sources         | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Misc 200 Area TRU Mixed Debris |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 32.7         | 0.0        | 32.7         |
| Box - Misc                  | 29.4         | 0.0        | 29.4         |
| Uncontained                 | 48.3         | 0.0        | 48.3         |
| <b>Current Form Total</b>   | <b>110.4</b> | <b>0.0</b> | <b>110.4</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 86.9         | 0.0        | 86.9         |
| SWB Dir Ld w/ Liner         | 39.7         | 0.0        | 39.7         |
| <b>Final Form Total</b>     | <b>126.6</b> | <b>0.0</b> | <b>126.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 676.98                               |
| Aluminum-based Metals/Alloys    | 153.17                               |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 40.09                                |
| Cellulosics                     | 29.38                                |
| Rubber                          | 10.13                                |
| Plastics                        | 40.11                                |
| Cements                         | 0.02                                 |
| Inorganic Matrix                | 6.44                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 3.46                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 137.91                               |
| Packaging Material, Plastic     | 25.78                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.79E-02                                   |
| Cs-137  | 2.72E-04                                   |
| Pu-238  | 5.54E-02                                   |
| Pu-239  | 1.49E-01                                   |
| Pu-240  | 3.32E-02                                   |
| Pu-241  | 7.76E-01                                   |
| Pu-242  | 1.98E-06                                   |
| Sr-90   | 2.50E-04                                   |
| U-234   | 8.08E-08                                   |
| U-235   | 3.61E-09                                   |
| U-238   | 7.87E-08                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D043, F001, F002, F003, F004, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixtures, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

Waste Stream ID: **RL201-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                                       |                 |                   |            |          |    |
|-------------|-------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | CH |
| Source Cat. | Remediation/D&D Waste   | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | 201C TRU Mixed Debris   | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.7        | 0.0        | 1.7        |
| <b>Current Form Total</b>   | <b>1.7</b> | <b>0.0</b> | <b>1.7</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 14.1        | 0.0        | 14.1        |
| <b>Final Form Total</b>     | <b>14.1</b> | <b>0.0</b> | <b>14.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 28.57                                |
| Other Inorganic Materials       | 9.47                                 |
| Cellulosics                     | 66.67                                |
| Rubber                          | 123.40                               |
| Plastics                        | 33.33                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.96                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 325.10                               |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.94E-05                                   |
| Np-237  | 2.13E-10                                   |
| Pu-238  | 1.14E-05                                   |
| Pu-239  | 4.68E-04                                   |
| Pu-240  | 1.05E-04                                   |
| Pu-241  | 9.12E-04                                   |
| Pu-242  | 6.32E-09                                   |
| Th-229  | 2.39E-18                                   |
| Th-230  | 3.08E-14                                   |
| Th-232  | 1.51E-20                                   |
| U-233   | 5.82E-15                                   |
| U-234   | 4.81E-10                                   |
| U-235   | 6.46E-12                                   |
| U-236   | 4.35E-11                                   |
| U-238   | 1.33E-17                                   |

## Haz. Waste No(s).

D007, D010

## TRUCON Code(s)

125/225

## Waste Stream Description

The waste is generated from Remediation/D&D Waste activities at the PROCESS BUILDING, 3 HOT CELLS (DEMO'D). THE STREAM CONTAINS PLASTIC/POLYURETHANE, STAINLESS STEEL, PAPER/CARDBOARD, RUBBER, LEAD, CLOTH/RAGS/NYLON.



Waste Stream ID: **RL202S-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                                       |                 |                   |            |          |    |
|-------------|-------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | CH |
| Source Cat. | Remediation/D&D Waste   | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | 202S TRU Mixed Debris   | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.0        | 0.0        | 1.0        |
| <b>Current Form Total</b>   | <b>1.0</b> | <b>0.0</b> | <b>1.0</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.5        | 0.0        | 1.5        |
| <b>Final Form Total</b>     | <b>1.5</b> | <b>0.0</b> | <b>1.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 2.38                                 |
| Aluminum-based Metals/Alloys    | 0.79                                 |
| Other Metals                    | 0.67                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 2.90                                 |
| Rubber                          | 0.67                                 |
| Plastics                        | 46.16                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 3.12                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.71E-02                                   |
| Cs-137  | 3.71E-01                                   |
| Np-237  | 8.35E-08                                   |
| Pu-238  | 2.86E-03                                   |
| Pu-239  | 6.04E-02                                   |
| Pu-240  | 1.45E-02                                   |
| Pu-241  | 8.83E-02                                   |
| Pu-242  | 6.69E-07                                   |
| Sr-90   | 3.38E-01                                   |
| Th-229  | 2.73E-16                                   |
| Th-230  | 1.86E-12                                   |
| Th-232  | 5.19E-19                                   |
| U-233   | 1.25E-12                                   |
| U-234   | 5.85E-08                                   |
| U-235   | 4.17E-10                                   |
| U-236   | 3.00E-09                                   |
| U-238   | 7.07E-16                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009

## TRUCON Code(s)

125/225

## Waste Stream Description

The waste is generated from Remediation/D&amp;D Waste activities at the REDOX CANYON AND SERVICE FACILITY.

Waste Stream ID: **RL209E-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                          |                       |                 |                                       |            |          |    |
|-------------|--------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site  | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | 209E TRU Mixed Debris    |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 27.2        | 0.0        | 27.2        |
| 85-gal Drum Dir Ld w/ Liner | 3.5         | 0.0        | 3.5         |
| Box - Misc                  | 12.5        | 0.0        | 12.5        |
| <b>Current Form Total</b>   | <b>43.3</b> | <b>0.0</b> | <b>43.3</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 35.8        | 0.0        | 35.8        |
| SWB Dir Ld w/ Liner         | 17.0        | 0.0        | 17.0        |
| <b>Final Form Total</b>     | <b>52.8</b> | <b>0.0</b> | <b>52.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 567.01                               |
| Aluminum-based Metals/Alloys    | 94.95                                |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 42.65                                |
| Cellulosics                     | 95.92                                |
| Rubber                          | 40.66                                |
| Plastics                        | 98.97                                |
| Cements                         | 59.65                                |
| Inorganic Matrix                | 13.97                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 16.25                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 138.11                               |
| Packaging Material, Plastic     | 25.46                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.12E-01                                   |
| Cs-137  | 1.72E-03                                   |
| Np-237  | 1.38E-06                                   |
| Pu-238  | 1.17E-01                                   |
| Pu-239  | 4.78E+00                                   |
| Pu-240  | 1.07E+00                                   |
| Pu-241  | 9.10E+00                                   |
| Pu-242  | 6.45E-05                                   |
| Sr-90   | 1.58E-03                                   |
| Th-229  | 1.70E-14                                   |
| Th-230  | 5.30E-10                                   |
| Th-232  | 2.54E-16                                   |
| U-233   | 3.85E-11                                   |
| U-234   | 6.40E-06                                   |
| U-235   | 8.48E-08                                   |
| U-236   | 5.70E-07                                   |
| U-238   | 1.75E-13                                   |

## Haz. Waste No(s).

D006, D007, D018,  
D019, F002, F003,  
F005

## TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

Waste Stream ID: **RL216Z-02**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                            | Final Waste Form                      | Soils           | Waste Matrix Code | S4000      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | 216-Z-9 TRU Mixed Soil                             | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 73.4         | 0.0        | 73.4         |
| 85-gal Drum Dir Ld w/ Liner | 113.7        | 0.0        | 113.7        |
| Box - Misc                  | 12.7         | 0.0        | 12.7         |
| <b>Current Form Total</b>   | <b>199.8</b> | <b>0.0</b> | <b>199.8</b> |

| Final Form Volumes                |              |            |              |
|-----------------------------------|--------------|------------|--------------|
| Container Type                    | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner       | 177.8        | 0.0        | 177.8        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 17.0         | 0.0        | 17.0         |
| <b>Final Form Total</b>           | <b>194.9</b> | <b>0.0</b> | <b>194.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 324.00                               |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 137.81                               |
| Packaging Material, Plastic     | 35.19                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.68E-01                                   |
| Cs-137  | 2.78E-03                                   |
| Np-237  | 3.48E-07                                   |
| Pu-238  | 2.94E-01                                   |
| Pu-239  | 3.84E+00                                   |
| Pu-240  | 8.53E-01                                   |
| Pu-241  | 1.92E+01                                   |
| Pu-242  | 4.93E-05                                   |
| Sr-90   | 2.55E-03                                   |
| Th-229  | 9.22E-17                                   |
| Th-230  | 1.52E-11                                   |
| Th-232  | 2.50E-18                                   |
| U-233   | 1.49E-12                                   |
| U-234   | 1.68E-06                                   |
| U-235   | 7.57E-09                                   |
| U-236   | 5.06E-08                                   |
| U-238   | 1.49E-14                                   |

## Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D019, D027, D030, D039, F001, F002, F003, F005

**No TRUCON Codes Provided**

## Waste Stream Description

Waste consists of soil contaminated with TRU solutions. Soil is contained in a 0.3 mm polyethylene bag within an inner container. The outer container is a standard 55-gallon drum. Vermiculite is a packing material between the inner and outer container.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **RL221T-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                            | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | 221-T TRU Mixed Debris                             |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 3.5         | 0.0        | 3.5         |
| Box - Misc                  | 8.7         | 0.0        | 8.7         |
| <b>Current Form Total</b>   | <b>12.2</b> | <b>0.0</b> | <b>12.2</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 4.4         | 0.0        | 4.4         |
| SWB Dir Ld w/ Liner         | 13.2        | 0.0        | 13.2        |
| <b>Final Form Total</b>     | <b>17.6</b> | <b>0.0</b> | <b>17.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 552.00                               |
| Aluminum-based Metals/Alloys    | 87.00                                |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 43.00                                |
| Cellulosics                     | 105.00                               |
| Rubber                          | 45.00                                |
| Plastics                        | 107.00                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 15.00                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 18.00                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 147.87                               |
| Packaging Material, Plastic     | 10.09                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.67E-04                                   |
| Cs-137  | 4.11E-05                                   |
| Np-237  | 2.41E-09                                   |
| Pu-238  | 6.95E-05                                   |
| Pu-239  | 3.19E-03                                   |
| Pu-240  | 7.15E-04                                   |
| Pu-241  | 3.10E-03                                   |
| Pu-242  | 4.32E-08                                   |
| Sr-90   | 3.75E-05                                   |
| Th-229  | 1.00E-16                                   |
| Th-230  | 2.96E-12                                   |
| Th-232  | 5.37E-19                                   |
| U-233   | 1.25E-13                                   |
| U-234   | 1.37E-08                                   |
| U-235   | 3.93E-10                                   |
| U-236   | 6.79E-10                                   |
| U-238   | 6.34E-09                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011

## TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RL222S-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                       |                 |                                       |            |          |    |
|-------------|-------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | Other/Multiple Sources  | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | 222S TRU Mixed Debris   |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 68.8        | 0.0        | 68.8        |
| 85-gal Drum Dir Ld w/ Liner | 3.5         | 0.0        | 3.5         |
| <b>Current Form Total</b>   | <b>72.4</b> | <b>0.0</b> | <b>72.4</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 88.6        | 0.0        | 88.6        |
| <b>Final Form Total</b>     | <b>88.6</b> | <b>0.0</b> | <b>88.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 620.65                               |
| Aluminum-based Metals/Alloys    | 123.13                               |
| Other Metals                    | 0.01                                 |
| Other Inorganic Materials       | 41.32                                |
| Cellulosics                     | 62.79                                |
| Rubber                          | 24.79                                |
| Plastics                        | 69.67                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 10.36                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 10.01                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.92E-03                                   |
| Cs-137  | 5.01E-04                                   |
| Pu-238  | 2.40E-03                                   |
| Pu-239  | 8.01E-02                                   |
| Pu-240  | 1.82E-02                                   |
| Pu-241  | 3.56E-01                                   |
| Pu-242  | 1.13E-06                                   |
| Sr-90   | 4.66E-04                                   |
| U-233   | 1.16E-02                                   |
| U-234   | 5.54E-07                                   |
| U-235   | 5.69E-08                                   |
| U-238   | 6.13E-10                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D030, D039, F001, F002, F003, F004, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

The waste is generated from Analytical Laboratory Waste activities at the CONTROL LABORATORY.

Waste Stream ID: **RL231Z-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                          |                       |                 |                   |                                       |          |    |
|-------------|--------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Hanford (Richland) Site  | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5000                                 | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | 231-Z TRU Mixed Debris   |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 112.1        | 0.0        | 112.1        |
| 85-gal Drum Dir Ld w/ Liner | 25.8         | 0.0        | 25.8         |
| Box - Misc                  | 831.4        | 0.0        | 831.4        |
| <b>Current Form Total</b>   | <b>969.3</b> | <b>0.0</b> | <b>969.3</b> |

| Final Form Volumes          |               |            |               |
|-----------------------------|---------------|------------|---------------|
| Container Type              | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner | 155.8         | 0.0        | 155.8         |
| SWB Dir Ld w/ Liner         | 1117.0        | 0.0        | 1117.0        |
| <b>Final Form Total</b>     | <b>1272.8</b> | <b>0.0</b> | <b>1272.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 675.33                               |
| Aluminum-based Metals/Alloys    | 152.96                               |
| Other Metals                    | 0.35                                 |
| Other Inorganic Materials       | 40.04                                |
| Cellulosics                     | 28.99                                |
| Rubber                          | 8.68                                 |
| Plastics                        | 39.70                                |
| Cements                         | 92.25                                |
| Inorganic Matrix                | 6.40                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 3.38                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 150.72                               |
| Packaging Material, Plastic     | 5.58                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.50E-01                                   |
| Cs-137  | 1.42E-04                                   |
| Np-237  | 8.78E-07                                   |
| Pu-238  | 7.56E-02                                   |
| Pu-239  | 1.19E+00                                   |
| Pu-240  | 2.68E-01                                   |
| Pu-241  | 3.38E+00                                   |
| Pu-242  | 1.61E-05                                   |
| Sr-90   | 1.29E-04                                   |
| Th-229  | 8.89E-15                                   |
| Th-230  | 4.71E-08                                   |
| Th-232  | 4.34E-08                                   |
| U-233   | 2.28E-11                                   |
| U-234   | 4.05E-04                                   |
| U-235   | 1.15E-06                                   |
| U-236   | 1.03E-07                                   |
| U-238   | 4.43E-05                                   |

## Haz. Waste No(s).

D006, D008, D009, D019, F001, F002, F003, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

The waste is generated from R&D/R&D Laboratory Waste activities at the MATERIALS ENGINEERING LABORATORY.

Waste Stream ID: **RL231Z-03**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                |                       |                       |                                       |            |          |    |
|-------------|--------------------------------|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site        | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3100      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste       | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | 231Z TRU Mixed Solid Inorganic |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 85-gal Drum Dir Ld w/ Liner | 1.6        | 0.0        | 1.6        |
| <b>Current Form Total</b>   | <b>1.6</b> | <b>0.0</b> | <b>1.6</b> |

| Final Form Volumes                 |             |            |             |
|------------------------------------|-------------|------------|-------------|
| Container Type                     | Stored      | Proj.      | Total       |
| SWB w/ 4 - 55-gal Drums w/o Liners | 13.2        | 0.0        | 13.2        |
| <b>Final Form Total</b>            | <b>13.2</b> | <b>0.0</b> | <b>13.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 71.25                                |
| Other Inorganic Materials       | 0.13                                 |
| Cellulosics                     | 4.46                                 |
| Rubber                          | 1.06                                 |
| Plastics                        | 13.97                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 63.37                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 211.10                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.81E-01                                   |
| Np-237  | 6.63E-06                                   |
| Pu-238  | 2.88E-01                                   |
| Pu-239  | 3.81E-03                                   |
| Pu-240  | 3.26E-03                                   |
| Pu-241  | 6.90E+00                                   |
| Pu-242  | 2.94E-08                                   |
| Th-229  | 2.64E-13                                   |
| Th-230  | 3.10E-09                                   |
| Th-232  | 1.74E-18                                   |
| U-233   | 3.40E-10                                   |
| U-234   | 2.46E-05                                   |
| U-235   | 1.01E-10                                   |
| U-236   | 2.61E-09                                   |
| U-238   | 1.20E-16                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D019, F001,  
F002, F003, F005

## TRUCON Code(s)

122/222

## Waste Stream Description

The waste is generated from R&amp;D/R&amp;D Laboratory Waste activities at the MATERIALS ENGINEERING LABORATORY.

Waste Stream ID: **RL233S-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                                       |                 |                   |            |          |    |
|-------------|-------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | CH |
| Source Cat. | Other/Multiple Sources  | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | 233S TRU Mixed Debris   | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 8.3         | 0.0        | 8.3         |
| 85-gal Drum Dir Ld w/ Liner | 7.7         | 0.0        | 7.7         |
| SWB Dir Ld w/ Liner         | 54.8        | 0.0        | 54.8        |
| <b>Current Form Total</b>   | <b>70.9</b> | <b>0.0</b> | <b>70.9</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 36.4        | 0.0        | 36.4        |
| SWB Dir Ld w/ Liner         | 54.8        | 0.0        | 54.8        |
| <b>Final Form Total</b>     | <b>91.2</b> | <b>0.0</b> | <b>91.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 538.07                               |
| Aluminum-based Metals/Alloys    | 84.80                                |
| Other Metals                    | 0.02                                 |
| Other Inorganic Materials       | 44.37                                |
| Cellulosics                     | 102.35                               |
| Rubber                          | 43.86                                |
| Plastics                        | 104.74                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 14.62                                |
| Organic Matrix                  | 0.01                                 |
| Soils/gravel                    | 18.78                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 144.44                               |
| Packaging Material, Plastic     | 15.49                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.49E-02                                   |
| Cs-137  | 8.19E-05                                   |
| Np-237  | 2.54E-08                                   |
| Pu-238  | 3.98E-02                                   |
| Pu-239  | 7.77E-01                                   |
| Pu-240  | 1.90E-01                                   |
| Pu-241  | 3.58E+00                                   |
| Pu-242  | 6.61E-05                                   |
| Sr-90   | 7.61E-05                                   |
| Th-229  | 6.39E-18                                   |
| Th-230  | 2.05E-12                                   |
| Th-232  | 5.55E-19                                   |
| U-233   | 1.05E-13                                   |
| U-234   | 2.27E-07                                   |
| U-235   | 1.53E-09                                   |
| U-236   | 1.12E-08                                   |
| U-238   | 2.00E-14                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F003, F005

## TRUCON Code(s)

122/222

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters. The waste is generated from Remediation/D&D Waste activities at the PLUTONIUM CONCENTRATION FACILITY.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.



Waste Stream ID: **RL2718-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                            | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | 2714U and 2718E TRU Mixed Debris                   |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Current Form Total</b>   | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.8        | 0.0        | 0.8        |
| <b>Final Form Total</b>     | <b>0.8</b> | <b>0.0</b> | <b>0.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.01                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 42.51                                |
| Other Inorganic Materials       | 83.98                                |
| Cellulosics                     | 6.79                                 |
| Rubber                          | 9.17                                 |
| Plastics                        | 13.58                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 7.70                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 33.69                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.20E-01                                   |
| Cs-137  | 7.05E-05                                   |
| Np-237  | 2.20E-06                                   |
| Pu-238  | 5.10E-04                                   |
| Pu-239  | 6.34E-02                                   |
| Pu-240  | 1.08E-02                                   |
| Pu-241  | 1.50E-02                                   |
| Pu-242  | 9.48E-08                                   |
| Sr-90   | 6.35E-05                                   |
| Th-229  | 3.84E-14                                   |
| Th-230  | 1.81E-12                                   |
| Th-232  | 2.03E-18                                   |
| U-233   | 7.66E-11                                   |
| U-234   | 2.47E-08                                   |
| U-235   | 1.00E-09                                   |
| U-236   | 5.13E-09                                   |
| U-238   | 2.29E-16                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the WAREHOUSE and CRITICAL MASS STORAGE.

Waste Stream ID: **RL300-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                                       |                 |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site   | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | CH |
| Source Cat. | Other/Multiple Sources    | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | 300 Area TRU Mixed Debris | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 36.4        | 0.0        | 36.4        |
| 85-gal Drum Dir Ld w/ Liner | 27.0        | 0.0        | 27.0        |
| Box - Misc                  | 5.9         | 0.0        | 5.9         |
| <b>Current Form Total</b>   | <b>69.3</b> | <b>0.0</b> | <b>69.3</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 65.3        | 0.0        | 65.3        |
| SWB Dir Ld w/ Liner         | 7.6         | 0.0        | 7.6         |
| <b>Final Form Total</b>     | <b>72.9</b> | <b>0.0</b> | <b>72.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 591.48                               |
| Aluminum-based Metals/Alloys    | 109.07                               |
| Other Metals                    | 0.64                                 |
| Other Inorganic Materials       | 42.03                                |
| Cellulosics                     | 78.77                                |
| Rubber                          | 32.49                                |
| Plastics                        | 83.91                                |
| Cements                         | 68.44                                |
| Inorganic Matrix                | 12.02                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 12.94                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 133.15                               |
| Packaging Material, Plastic     | 33.29                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.15E-01                                   |
| Cs-137  | 1.80E-02                                   |
| Pu-238  | 1.47E-01                                   |
| Pu-239  | 2.13E+00                                   |
| Pu-240  | 4.77E-01                                   |
| Pu-241  | 9.59E+00                                   |
| Pu-242  | 2.87E-05                                   |
| Sr-90   | 1.67E-02                                   |
| Th-232  | 4.56E-05                                   |
| U-233   | 5.19E-02                                   |
| U-234   | 3.28E-03                                   |
| U-235   | 1.53E-04                                   |
| U-238   | 4.18E-04                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D034, D035, D037, D043, F001, F002, F003, F004, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the WASTE NEUTRALIZATION FACILITY.

Waste Stream ID: **RL308-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                       |                 |                                       |            |          |    |
|-------------|-------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | Other/Multiple Sources  | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | 308 TRU Mixed Debris    |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 18.9        | 0.0        | 18.9        |
| 85-gal Drum Dir Ld w/ Liner | 1.6         | 0.0        | 1.6         |
| SWB Dir Ld w/ Liner         | 1.9         | 0.0        | 1.9         |
| <b>Current Form Total</b>   | <b>22.4</b> | <b>0.0</b> | <b>22.4</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 24.3        | 0.0        | 24.3        |
| SWB Dir Ld w/ Liner         | 3.8         | 0.0        | 3.8         |
| <b>Final Form Total</b>     | <b>28.1</b> | <b>0.0</b> | <b>28.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 269.24                               |
| Aluminum-based Metals/Alloys    | 53.46                                |
| Other Metals                    | 66.19                                |
| Other Inorganic Materials       | 33.59                                |
| Cellulosics                     | 29.17                                |
| Rubber                          | 11.53                                |
| Plastics                        | 54.73                                |
| Cements                         | 5.89                                 |
| Inorganic Matrix                | 5.87                                 |
| Organic Matrix                  | 0.22                                 |
| Soils/gravel                    | 3.02                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 133.85                               |
| Packaging Material, Plastic     | 32.19                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.72E+00                                   |
| Cs-137  | 2.45E-04                                   |
| Pu-238  | 1.33E+00                                   |
| Pu-239  | 3.10E-01                                   |
| Pu-240  | 1.20E-01                                   |
| Pu-241  | 1.04E+02                                   |
| Pu-242  | 6.57E-06                                   |
| Sr-90   | 2.27E-04                                   |
| U-233   | 2.20E-03                                   |
| U-234   | 4.69E-04                                   |
| U-235   | 6.25E-06                                   |
| U-238   | 1.60E-04                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D034, D037, D043, F001, F002, F003, F004, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the FUELS DEVELOPMENT LABORATORY.

Waste Stream ID: **RL324-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                          |                                       |                 |                   |            |          |    |
|-------------|--------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site  | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | 324 TRU Mixed Debris     | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 9.6          | 0.0        | 9.6          |
| 85-gal Drum Dir Ld w/ Liner | 1.0          | 0.0        | 1.0          |
| Box - Misc                  | 90.4         | 0.0        | 90.4         |
| <b>Current Form Total</b>   | <b>101.0</b> | <b>0.0</b> | <b>101.0</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 12.5         | 0.0        | 12.5         |
| SWB Dir Ld w/ Liner         | 122.9        | 0.0        | 122.9        |
| <b>Final Form Total</b>     | <b>135.3</b> | <b>0.0</b> | <b>135.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 443.18                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 175.87                               |
| Other Inorganic Materials       | 51.60                                |
| Cellulosics                     | 2.97                                 |
| Rubber                          | 0.96                                 |
| Plastics                        | 1.68                                 |
| Cements                         | 0.12                                 |
| Inorganic Matrix                | 0.02                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 151.41                               |
| Packaging Material, Plastic     | 4.50                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.53E-01                                   |
| Cs-137  | 5.63E-02                                   |
| Pu-238  | 8.07E-02                                   |
| Pu-239  | 3.02E+00                                   |
| Pu-240  | 6.74E-01                                   |
| Pu-241  | 9.83E+00                                   |
| Pu-242  | 4.10E-05                                   |
| Sr-90   | 3.45E-02                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D033, D034, D035, D036, D037, D039, D040, D043, F001, F002, F003, F004, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **RL324-07**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                            |                       |                 |                                       |            |          |    |
|-------------|----------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site    | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | RH |
| Source Cat. | R&D/R&D Laboratory Waste   | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | 324 TRU RH Nonmixed Debris |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Box - Misc                | 50.1        | 0.0        | 50.1        |
| <b>Current Form Total</b> | <b>50.1</b> | <b>0.0</b> | <b>50.1</b> |

| Final Form Volumes                          |             |            |             |
|---|-------------|------------|-------------|
| Container Type                              | Stored      | Proj.      | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 67.6        | 0.0        | 67.6        |
| <b>Final Form Total</b>                     | <b>67.6</b> | <b>0.0</b> | <b>67.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 217.72                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 527.37                               |
| Other Inorganic Materials       | 129.83                               |
| Cellulosics                     | 8.75                                 |
| Rubber                          | 7.43                                 |
| Plastics                        | 5.17                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.34                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.68E+00                                   |
| Cs-137  | 7.21E+02                                   |
| Np-237  | 2.68E-06                                   |
| Pu-238  | 8.45E-02                                   |
| Pu-239  | 1.18E-01                                   |
| Pu-240  | 3.29E-02                                   |
| Pu-241  | 7.08E+00                                   |
| Pu-242  | 1.04E-03                                   |
| Sr-90   | 3.72E+02                                   |
| Th-229  | 4.44E-15                                   |
| Th-230  | 2.77E-11                                   |
| Th-232  | 6.03E-19                                   |
| U-233   | 2.85E-11                                   |
| U-234   | 1.22E-06                                   |
| U-235   | 5.82E-10                                   |
| U-236   | 4.88E-09                                   |
| U-238   | 7.85E-13                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

## Waste Stream Description

The waste is generated from R&amp;D/R&amp;D Laboratory Waste activities at the CHEMICAL ENGINEERING BUILDING.

Waste Stream ID: **RL324-08**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                          |                                       |                 |                   |            |          |    |
|-------------|--------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site  | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | RH |
| Source Cat. | R&D/R&D Laboratory Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | 324 TRU RH Mixed Debris  | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Box - Misc                | 50.0        | 0.0        | 50.0        |
| <b>Current Form Total</b> | <b>50.0</b> | <b>0.0</b> | <b>50.0</b> |

| Final Form Volumes                         |             |            |             |
|--|-------------|------------|-------------|
| Container Type                             | Stored      | Proj.      | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 67.6        | 0.0        | 67.6        |
| <b>Final Form Total</b>                    | <b>67.6</b> | <b>0.0</b> | <b>67.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 273.20                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 207.93                               |
| Other Inorganic Materials       | 14.53                                |
| Cellulosics                     | 0.96                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.45                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 41.22                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.38E+00                                   |
| Cs-137  | 1.72E+03                                   |
| Np-237  | 1.20E-05                                   |
| Pu-238  | 4.23E-01                                   |
| Pu-239  | 8.42E-02                                   |
| Pu-240  | 8.25E-02                                   |
| Pu-241  | 3.16E+00                                   |
| Pu-242  | 1.33E-04                                   |
| Sr-90   | 1.17E+03                                   |
| Th-229  | 2.00E-14                                   |
| Th-230  | 1.39E-10                                   |
| Th-232  | 1.51E-18                                   |
| U-233   | 1.28E-10                                   |
| U-234   | 6.12E-06                                   |
| U-235   | 4.15E-10                                   |
| U-236   | 1.22E-08                                   |
| U-238   | 1.00E-13                                   |

## Haz. Waste No(s).

D004, D006, D007,  
D008

## TRUCON Code(s)

325

## Waste Stream Description

The waste is generated from R&amp;D/R&amp;D Laboratory Waste activities at the CHEMICAL ENGINEERING BUILDING.

Waste Stream ID: **RL325-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                          |                       |                 |                   |                                       |          |    |
|-------------|--------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Hanford (Richland) Site  | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5000                                 | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | 325 TRU Mixed Debris     |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |               |            |               |
|-----------------------------|---------------|------------|---------------|
| Container Type              | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner | 723.2         | 0.0        | 723.2         |
| 85-gal Drum Dir Ld w/ Liner | 264.4         | 0.0        | 264.4         |
| Box - Misc                  | 223.2         | 0.0        | 223.2         |
| SWB Dir Ld w/ Liner         | 17.0          | 0.0        | 17.0          |
| Uncontained                 | 1.7           | 0.0        | 1.7           |
| <b>Current Form Total</b>   | <b>1229.5</b> | <b>0.0</b> | <b>1229.5</b> |

| Final Form Volumes          |               |            |               |
|-----------------------------|---------------|------------|---------------|
| Container Type              | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner | 1082.8        | 0.0        | 1082.8        |
| SWB Dir Ld w/ Liner         | 317.5         | 0.0        | 317.5         |
| <b>Final Form Total</b>     | <b>1400.4</b> | <b>0.0</b> | <b>1400.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 289.08                               |
| Aluminum-based Metals/Alloys    | 0.01                                 |
| Other Metals                    | 33.76                                |
| Other Inorganic Materials       | 127.09                               |
| Cellulosics                     | 41.55                                |
| Rubber                          | 1.81                                 |
| Plastics                        | 22.73                                |
| Cements                         | 48.14                                |
| Inorganic Matrix                | 6.61                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 135.95                               |
| Packaging Material, Plastic     | 28.88                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.16E-01                                   |
| Cs-137  | 1.31E-01                                   |
| Pu-238  | 6.73E-02                                   |
| Pu-239  | 2.21E-01                                   |
| Pu-240  | 7.41E-02                                   |
| Pu-241  | 2.63E+00                                   |
| Pu-242  | 2.63E-05                                   |
| Sr-90   | 7.61E-01                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D033, D034, D035, D036, D037, D038, D039, D040, D043, F001, F002, F003, F004, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

The waste is generated from R&D/R&D Laboratory Waste activities at the CESIUM RECOVERY FAC and the RADIOCHEMISTRY BUILDING.

Waste Stream ID: **RL325-03**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                               |                       |                       |                                       |            |          |    |
|-------------|-------------------------------|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site       | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3100      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste      | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | 325 TRU Mixed Solid Inorganic |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.7        | 0.0        | 1.7        |
| <b>Current Form Total</b>   | <b>1.7</b> | <b>0.0</b> | <b>1.7</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.1        | 0.0        | 2.1        |
| <b>Final Form Total</b>     | <b>2.1</b> | <b>0.0</b> | <b>2.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 2.32                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 23.25                                |
| Other Inorganic Materials       | 10.84                                |
| Cellulosics                     | 1.20                                 |
| Rubber                          | 0.96                                 |
| Plastics                        | 15.50                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 141.77                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.36E-01                                   |
| Cs-137  | 9.01E-04                                   |
| Pu-238  | 1.18E-01                                   |
| Pu-239  | 2.60E-01                                   |
| Pu-240  | 1.58E-01                                   |
| Pu-241  | 3.80E+00                                   |
| Pu-242  | 7.97E-05                                   |
| Sr-90   | 8.21E-04                                   |
| U-235   | 1.88E-06                                   |
| U-238   | 1.29E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D033, D034, D036, D038, D039, D040, D043, F001, F002, F003, F004, F005

## TRUCON Code(s)

122/222

## Waste Stream Description

The waste is generated from R&D/R&D Laboratory Waste activities at the RADIOCHEMISTRY BUILDING.



Waste Stream ID: **RL325-05**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                          |                       |                 |                   |                                       |          |    |
|-------------|--------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Hanford (Richland) Site  | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5000                                 | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | 325 TRU Nonmixed Debris  |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| Uncontained               | 5.3        | 0.0        | 5.3        |
| <b>Current Form Total</b> | <b>5.3</b> | <b>0.0</b> | <b>5.3</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 5.2        | 0.0        | 5.2        |
| <b>Final Form Total</b>     | <b>5.2</b> | <b>0.0</b> | <b>5.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 77.49                                |
| Aluminum-based Metals/Alloys    | 0.01                                 |
| Other Metals                    | 95.98                                |
| Other Inorganic Materials       | 28.51                                |
| Cellulosics                     | 28.18                                |
| Rubber                          | 2.12                                 |
| Plastics                        | 22.93                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 19.62                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.06                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.05E+01                                   |
| Cs-137  | 9.89E-02                                   |
| Np-237  | 1.46E-05                                   |
| Pu-238  | 2.89E+00                                   |
| Pu-239  | 7.37E-02                                   |
| Pu-240  | 7.43E-02                                   |
| Pu-241  | 3.45E+02                                   |
| Pu-242  | 1.30E-04                                   |
| Sr-90   | 1.33E-02                                   |
| Th-229  | 2.23E-14                                   |
| Th-230  | 9.48E-10                                   |
| Th-232  | 1.36E-18                                   |
| U-233   | 1.47E-10                                   |
| U-234   | 4.19E-05                                   |
| U-235   | 1.09E-06                                   |
| U-236   | 1.10E-08                                   |
| U-238   | 1.65E-08                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

The waste is generated from R&D/R&D Laboratory Waste activities at the CESIUM RECOVERY FAC. generated from R&D/R&D Laboratory Waste activities at

The waste is generated from R&D/R&D Laboratory Waste activities at the FIELD OFFICE BUILDING. The waste is

Waste Stream ID: **RL325-07**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                            |                       |                 |                                       |            |          |    |
|-------------|----------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site    | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | RH |
| Source Cat. | R&D/R&D Laboratory Waste   | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | 325 TRU RH Nonmixed Debris |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 0.4         | 0.0        | 0.4         |
| Box - Misc                  | 64.7        | 0.0        | 64.7        |
| SLB2                        | 0.0         | 0.0        | 0.0         |
| Uncontained                 | 20.0        | 0.0        | 20.0        |
| <b>Current Form Total</b>   | <b>85.1</b> | <b>0.0</b> | <b>85.1</b> |

| Final Form Volumes                         |              |            |              |
|--|--------------|------------|--------------|
| Container Type                             | Stored       | Proj.      | Total        |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 143.3        | 0.0        | 143.3        |
| <b>Final Form Total</b>                    | <b>143.3</b> | <b>0.0</b> | <b>143.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 353.21                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 245.11                               |
| Other Inorganic Materials       | 121.24                               |
| Cellulosics                     | 7.77                                 |
| Rubber                          | 8.54                                 |
| Plastics                        | 31.04                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 6.64                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.94E+01                                   |
| Cs-137  | 2.83E+00                                   |
| Np-237  | 5.75E-04                                   |
| Pu-238  | 5.57E+00                                   |
| Pu-239  | 3.79E-01                                   |
| Pu-240  | 4.89E-01                                   |
| Pu-241  | 6.39E+02                                   |
| Pu-242  | 2.44E-04                                   |
| Sr-90   | 1.69E+00                                   |
| Th-229  | 2.03E-11                                   |
| Th-230  | 5.07E-08                                   |
| Th-232  | 2.24E-16                                   |
| U-233   | 2.79E-08                                   |
| U-234   | 4.37E-04                                   |
| U-235   | 6.62E-06                                   |
| U-236   | 3.63E-07                                   |
| U-238   | 9.20E-13                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

## Waste Stream Description

The waste is generated from R&amp;D/R&amp;D Laboratory Waste activities at the RADIOCHEMISTRY BUILDING.

Waste Stream ID: **RL325-08**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                       |                 |                                       |            |          |    |
|-------------|-------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | RH |
| Source Cat. | Other/Multiple Sources  | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | 325 TRU RH Mixed Debris |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| Uncontained               | 3.2        | 0.0        | 3.2        |
| <b>Current Form Total</b> | <b>3.2</b> | <b>0.0</b> | <b>3.2</b> |

| Final Form Volumes                         |             |            |             |
|--|-------------|------------|-------------|
| Container Type                             | Stored      | Proj.      | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 13.4        | 0.0        | 13.4        |
| <b>Final Form Total</b>                    | <b>13.4</b> | <b>0.0</b> | <b>13.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 502.58                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.58                                 |
| Other Inorganic Materials       | 262.90                               |
| Cellulosics                     | 11.24                                |
| Rubber                          | 2.42                                 |
| Plastics                        | 20.60                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 3.32                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.81E-01                                   |
| Cs-137  | 2.51E+01                                   |
| Np-237  | 4.67E-07                                   |
| Pu-238  | 3.76E-01                                   |
| Pu-239  | 2.40E+00                                   |
| Pu-240  | 1.20E+00                                   |
| Pu-241  | 4.48E+01                                   |
| Sr-90   | 2.44E+01                                   |
| Th-229  | 5.03E-16                                   |
| Th-230  | 1.23E-10                                   |
| Th-232  | 2.19E-17                                   |
| U-233   | 3.82E-12                                   |
| U-234   | 5.45E-06                                   |
| U-235   | 1.18E-08                                   |
| U-236   | 1.77E-07                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

Waste Stream ID: **RL327-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                            | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | 327 TRU Mixed Debris                               | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 28.9        | 0.0        | 28.9        |
| 85-gal Drum Dir Ld w/ Liner | 0.6         | 0.0        | 0.6         |
| Box - Misc                  | 33.8        | 0.0        | 33.8        |
| Uncontained                 | 7.3         | 0.0        | 7.3         |
| <b>Current Form Total</b>   | <b>70.7</b> | <b>0.0</b> | <b>70.7</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 35.6        | 0.0        | 35.6        |
| SWB Dir Ld w/ Liner         | 45.4        | 0.0        | 45.4        |
| <b>Final Form Total</b>     | <b>80.9</b> | <b>0.0</b> | <b>80.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 938.23                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 211.70                               |
| Other Inorganic Materials       | 15.65                                |
| Cellulosics                     | 15.94                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 18.70                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.54                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 143.52                               |
| Packaging Material, Plastic     | 16.93                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.17E-01                                   |
| Cs-137  | 8.32E+01                                   |
| Pu-238  | 2.10E-01                                   |
| Pu-239  | 8.73E-02                                   |
| Pu-240  | 7.66E-02                                   |
| Pu-241  | 6.01E+00                                   |
| Pu-242  | 1.11E-04                                   |
| Sr-90   | 1.28E-04                                   |

## Haz. Waste No(s).

D005, D006, D007,  
D008, D009, D010,  
D011, F001, F002,  
F003, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the POST IRRADIATION TEST LABORATORY.

Waste Stream ID: **RL327-07**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                            |                       |                 |                                       |            |          |    |
|-------------|----------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site    | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | RH |
| Source Cat. | Other/Multiple Sources     | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | 327 TRU RH Nonmixed Debris |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| SLB2                      | 0.1        | 0.0        | 0.1        |
| <b>Current Form Total</b> | <b>0.1</b> | <b>0.0</b> | <b>0.1</b> |

| Final Form Volumes                         |             |            |             |
|--|-------------|------------|-------------|
| Container Type                             | Stored      | Proj.      | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 16.9        | 0.0        | 16.9        |
| <b>Final Form Total</b>                    | <b>16.9</b> | <b>0.0</b> | <b>16.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 8569.72                              |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 3.10                                 |
| Other Inorganic Materials       | 0.97                                 |
| Cellulosics                     | 1.11                                 |
| Rubber                          | 0.01                                 |
| Plastics                        | 5.10                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.59E+01                                   |
| Cs-137  | 1.20E+03                                   |
| Np-237  | 9.00E-05                                   |
| Pu-238  | 5.24E+00                                   |
| Pu-239  | 9.49E+00                                   |
| Pu-240  | 6.45E+00                                   |
| Pu-241  | 1.57E+02                                   |
| Pu-242  | 5.70E-03                                   |
| Sr-90   | 4.48E+02                                   |
| Th-229  | 2.67E-12                                   |
| Th-230  | 1.07E-07                                   |
| Th-232  | 2.37E-14                                   |
| U-233   | 3.96E-09                                   |
| U-234   | 6.86E-04                                   |
| U-235   | 2.29E-04                                   |
| U-236   | 2.23E-05                                   |
| U-238   | 5.67E-04                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

## Waste Stream Description

The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the POST IRRADIATION TEST LABORATORY.  
The waste is generated from Materials Production/Recovery Effluents activities at the POST IRRADIATION TEST LABORATORY C CELL.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **RLARG-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                  |                       |                 |                                       |            |          |    |
|-------------|----------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site          | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste         | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Argonne Nat Lab TRU Mixed Debris |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Current Form Total</b>   | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.8        | 0.0        | 0.8        |
| <b>Final Form Total</b>     | <b>0.8</b> | <b>0.0</b> | <b>0.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 593.93                               |
| Aluminum-based Metals/Alloys    | 80.58                                |
| Other Metals                    | 9.92                                 |
| Other Inorganic Materials       | 39.83                                |
| Cellulosics                     | 97.25                                |
| Rubber                          | 41.68                                |
| Plastics                        | 99.10                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 26.24                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 16.67                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.00E+01                                   |
| Cs-137  | 5.73E-05                                   |
| Np-237  | 9.77E-05                                   |
| Pu-238  | 5.52E+00                                   |
| Pu-239  | 2.04E+01                                   |
| Pu-240  | 1.03E+01                                   |
| Pu-241  | 2.43E+02                                   |
| Pu-242  | 4.40E-03                                   |
| Sr-90   | 5.17E-05                                   |
| Th-229  | 5.11E-04                                   |
| Th-230  | 6.95E-07                                   |
| Th-232  | 1.52E-04                                   |
| U-233   | 2.60E-01                                   |
| U-234   | 3.85E-03                                   |
| U-235   | 3.59E-04                                   |
| U-236   | 6.40E-06                                   |
| U-238   | 3.88E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters. The waste is generated from R&D/R&D Laboratory Waste activities at the Argonne National Laboratory - East (IL).

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **RLBART-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                               |                                       |                 |                   |            |          |    |
|-------------|-------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site       | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste      | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Bartlesville TRU Mixed Debris | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Current Form Total</b>   | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b>     | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 552.00                               |
| Aluminum-based Metals/Alloys    | 87.00                                |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 43.00                                |
| Cellulosics                     | 105.00                               |
| Rubber                          | 45.00                                |
| Plastics                        | 107.00                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 15.00                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 18.00                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.64E+00                                   |
| Cs-137  | 2.89E-02                                   |
| Np-237  | 1.35E-05                                   |
| Pu-238  | 1.34E-06                                   |
| Pu-239  | 5.81E-05                                   |
| Pu-240  | 1.30E-05                                   |
| Pu-241  | 7.89E-05                                   |
| Pu-242  | 7.85E-10                                   |
| Sr-90   | 2.65E-02                                   |
| Th-229  | 5.79E-13                                   |
| Th-230  | 1.22E-14                                   |
| Th-232  | 5.94E-21                                   |
| U-233   | 7.39E-10                                   |
| U-234   | 1.05E-10                                   |
| U-235   | 1.43E-12                                   |
| U-236   | 9.62E-12                                   |
| U-238   | 2.96E-18                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **RLBAT-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                    |                       |                 |                                       |            |          |    |
|-------------|------------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site            | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste           | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Battelle Columbus TRU Mixed Debris |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 8.5         | 0.0        | 8.5         |
| 85-gal Drum Dir Ld w/ Liner | 11.3        | 0.0        | 11.3        |
| <b>Current Form Total</b>   | <b>19.8</b> | <b>0.0</b> | <b>19.8</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 19.1        | 0.0        | 19.1        |
| <b>Final Form Total</b>     | <b>19.1</b> | <b>0.0</b> | <b>19.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 644.02                               |
| Aluminum-based Metals/Alloys    | 135.72                               |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 40.86                                |
| Cellulosics                     | 49.32                                |
| Rubber                          | 18.40                                |
| Plastics                        | 57.75                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 8.69                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 7.29                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.21E-02                                   |
| Cs-137  | 1.68E-03                                   |
| Np-237  | 1.50E-07                                   |
| Pu-238  | 3.86E+00                                   |
| Pu-239  | 4.75E-01                                   |
| Pu-240  | 1.06E-01                                   |
| Pu-241  | 8.58E-01                                   |
| Pu-242  | 6.40E-06                                   |
| Sr-90   | 1.55E-03                                   |
| Th-229  | 2.06E-15                                   |
| Th-230  | 6.53E-08                                   |
| Th-232  | 2.80E-17                                   |
| U-233   | 4.44E-12                                   |
| U-234   | 4.91E-04                                   |
| U-235   | 1.85E-05                                   |
| U-236   | 5.97E-08                                   |
| U-238   | 5.74E-05                                   |

## Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, F001, F002, F003, F005, P015

## TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.



Waste Stream ID: **RLBAT-08**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                           |                       |                 |                                       |            |          |    |
|-------------|---------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site   | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | RH |
| Source Cat. | R&D/R&D Laboratory Waste  | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | BATCO TRU RH Mixed Debris |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 4.2        | 0.0        | 4.2        |
| <b>Current Form Total</b>   | <b>4.2</b> | <b>0.0</b> | <b>4.2</b> |

| Final Form Volumes                         |             |            |             |
|--|-------------|------------|-------------|
| Container Type                             | Stored      | Proj.      | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 22.3        | 0.0        | 22.3        |
| <b>Final Form Total</b>                    | <b>22.3</b> | <b>0.0</b> | <b>22.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1377.22                              |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 12.30                                |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.81E-08                                   |
| Np-237  | 4.57E-14                                   |
| Pu-238  | 8.89E-09                                   |
| Pu-239  | 3.50E-07                                   |
| Pu-240  | 7.83E-08                                   |
| Pu-241  | 8.67E-07                                   |
| Pu-242  | 4.72E-12                                   |
| Th-229  | 4.43E-23                                   |
| Th-230  | 1.85E-18                                   |
| Th-232  | 9.18E-25                                   |
| U-233   | 3.77E-19                                   |
| U-234   | 1.03E-13                                   |
| U-235   | 1.38E-15                                   |
| U-236   | 9.29E-15                                   |
| U-238   | 2.85E-21                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

## Waste Stream Description

The waste is generated from R&amp;D/R&amp;D Laboratory Waste activities at the Battelle Columbus (OH).

Waste Stream ID: **RLBET-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                          |                       |                 |                   |                                       |          |    |
|-------------|--------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Hanford (Richland) Site  | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5000                                 | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | Bettis TRU Mixed Debris  |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b>     | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 552.00                               |
| Aluminum-based Metals/Alloys    | 87.00                                |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 43.00                                |
| Cellulosics                     | 105.00                               |
| Rubber                          | 45.00                                |
| Plastics                        | 107.00                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 15.00                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 18.00                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.35E-02                                   |
| Cs-137  | 2.41E-01                                   |
| Np-237  | 5.69E-08                                   |
| Pu-238  | 3.29E-03                                   |
| Pu-239  | 1.40E-01                                   |
| Pu-240  | 3.12E-02                                   |
| Pu-241  | 2.19E-01                                   |
| Pu-242  | 1.88E-06                                   |
| Sr-90   | 2.22E-01                                   |
| Th-229  | 1.07E-15                                   |
| Th-230  | 7.90E-08                                   |
| Th-232  | 1.11E-17                                   |
| U-233   | 1.97E-12                                   |
| U-234   | 3.99E-04                                   |
| U-235   | 4.09E-05                                   |
| U-236   | 2.04E-08                                   |
| U-238   | 4.40E-07                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RLBW-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                 |                                       |                 |                   |            |          |    |
|-------------|---------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site         | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste        | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Babcock Wilcox TRU Mixed Debris | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 132.9        | 0.0        | 132.9        |
| 85-gal Drum Dir Ld w/ Liner | 152.0        | 0.0        | 152.0        |
| Box - Misc                  | 17.0         | 0.0        | 17.0         |
| <b>Current Form Total</b>   | <b>301.9</b> | <b>0.0</b> | <b>301.9</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 283.9        | 0.0        | 283.9        |
| SWB Dir Ld w/ Liner         | 22.7         | 0.0        | 22.7         |
| <b>Final Form Total</b>     | <b>306.6</b> | <b>0.0</b> | <b>306.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 617.29                               |
| Aluminum-based Metals/Alloys    | 121.57                               |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 41.48                                |
| Cellulosics                     | 65.49                                |
| Rubber                          | 26.13                                |
| Plastics                        | 72.05                                |
| Cements                         | 33.89                                |
| Inorganic Matrix                | 10.53                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 10.40                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 132.48                               |
| Packaging Material, Plastic     | 34.35                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.14E+00                                   |
| Cs-137  | 3.20E-03                                   |
| Pu-238  | 9.82E-02                                   |
| Pu-239  | 3.51E+00                                   |
| Pu-240  | 7.85E-01                                   |
| Pu-241  | 1.59E+01                                   |
| Pu-242  | 4.73E-05                                   |
| Sr-90   | 2.98E-03                                   |
| U-234   | 2.82E-04                                   |
| U-235   | 5.96E-07                                   |
| U-238   | 3.32E-05                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D030, D035, F001, F002, F003, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

Waste Stream ID: **RLCBWD.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                       |                 |                   |                                       |          |    |
|-------------|-------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5490                                 | Handling | CH |
| Source Cat. | N/A                     | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                     |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                      |                   |             |
|--------------------------------------|-------------------|-------------|
| Container Type                       | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/o Liner         | WP-RLCBWD.001     | 4.8         |
| TDOP w/ 10 - 55-gal Drums w/o Liners | WP-RLCBWD.001     | 9.6         |
| <b>Shipped Total</b>                 |                   | <b>14.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 14.09                                |
| Aluminum-based Metals/Alloys | 0.05                                 |
| Other Metals                 | 0.62                                 |
| Other Inorganic Materials    | 30.33                                |
| Cellulosics                  | 19.98                                |
| Rubber                       | 3.83                                 |
| Plastics                     | 19.62                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.27E+00                                   |
| Cs-137  | 3.31E-08                                   |
| Np-237  | 8.06E-06                                   |
| Pu-238  | 2.78E-01                                   |
| Pu-239  | 1.65E+00                                   |
| Pu-240  | 7.79E-01                                   |
| Pu-241  | 1.21E+01                                   |
| Pu-242  | 1.18E-04                                   |
| Sr-90   | 3.01E-08                                   |
| U-233   | 3.35E-04                                   |
| U-234   | 4.23E-05                                   |
| U-235   | 1.36E-06                                   |
| U-238   | 1.70E-05                                   |

## Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, F001, F002, F003, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **RLCFF-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                             |                       |                 |                                       |            |          |    |
|-------------|-----------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste    | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Kerr McGee TRU Mixed Debris |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 11.2        | 0.0        | 11.2        |
| 85-gal Drum Dir Ld w/ Liner | 2.9         | 0.0        | 2.9         |
| <b>Current Form Total</b>   | <b>14.1</b> | <b>0.0</b> | <b>14.1</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 24.3        | 0.0        | 24.3        |
| <b>Final Form Total</b>     | <b>24.3</b> | <b>0.0</b> | <b>24.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 484.28                               |
| Aluminum-based Metals/Alloys    | 72.96                                |
| Other Metals                    | 8.09                                 |
| Other Inorganic Materials       | 42.09                                |
| Cellulosics                     | 89.32                                |
| Rubber                          | 37.82                                |
| Plastics                        | 96.02                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 14.76                                |
| Organic Matrix                  | 0.38                                 |
| Soils/gravel                    | 14.99                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.46E+00                                   |
| Cs-137  | 4.53E-03                                   |
| Pu-238  | 1.91E+00                                   |
| Pu-239  | 2.37E+01                                   |
| Pu-240  | 5.28E+00                                   |
| Pu-241  | 1.28E+02                                   |
| Pu-242  | 3.14E-04                                   |
| Sr-90   | 4.14E-03                                   |
| U-234   | 3.42E-05                                   |
| U-235   | 1.53E-06                                   |
| U-238   | 3.32E-05                                   |

## Haz. Waste No(s).

D007, D008, D009,  
D040, F001, F002,  
F003

## TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

The waste is generated from R&D/R&D Laboratory Waste activities at the Kerr McGee.

Waste Stream ID: **RLCFF-03**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                      |                       |                       |                                       |            |          |    |
|-------------|--------------------------------------|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site              | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3000      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste             | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Kerr McGee TRU Mixed Solid Inorganic |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 4.8        | 0.0        | 4.8        |
| <b>Current Form Total</b>   | <b>4.8</b> | <b>0.0</b> | <b>4.8</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 5.8        | 0.0        | 5.8        |
| <b>Final Form Total</b>     | <b>5.8</b> | <b>0.0</b> | <b>5.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 49.24                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 3.86                                 |
| Other Inorganic Materials       | 27.24                                |
| Cellulosics                     | 1.16                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 2.31                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 254.00                               |
| Organic Matrix                  | 6.95                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.31E-02                                   |
| Cs-137  | 6.47E-05                                   |
| Np-237  | 1.20E-07                                   |
| Pu-238  | 3.60E-03                                   |
| Pu-239  | 1.60E-01                                   |
| Pu-240  | 3.58E-02                                   |
| Pu-241  | 1.88E-01                                   |
| Pu-242  | 2.16E-06                                   |
| Sr-90   | 5.78E-05                                   |
| Th-229  | 2.60E-15                                   |
| Th-230  | 1.83E-11                                   |
| Th-232  | 9.47E-18                                   |
| U-233   | 4.57E-12                                   |
| U-234   | 2.09E-07                                   |
| U-235   | 3.00E-09                                   |
| U-236   | 2.02E-08                                   |
| U-238   | 6.18E-15                                   |

## Haz. Waste No(s).

D007, D008, D009,  
F001, F002, F003

## TRUCON Code(s)

122/222

## Waste Stream Description

The waste is generated from R&amp;D/R&amp;D Laboratory Waste activities at the Kerr McGee.

Waste Stream ID: **RLCFFD.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                       |                 |                   |            |                         |                    |
|-------------|-------------------------|-----------------------|-----------------|-------------------|------------|-------------------------|--------------------|
| Site        | Hanford (Richland) Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5490      | Handling                | CH                 |
| Source Cat. | N/A                     | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006 | Activity Concentrations | Decayed to CY 2006 |
| Stream Name | N/A                     |                       |                 |                   |            |                         |                    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner         | WP-RLCFFD.001     | 198.0        |
| 55-gal Drum Dir Ld w/o Liner        | WP-RLCFFD.001     | 1.0          |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-RLCFFD.001     | 62.3         |
| <b>Shipped Total</b>                |                   | <b>261.3</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 377.31                               |
| Aluminum-based Metals/Alloys | 1.97                                 |
| Other Metals                 | 0.39                                 |
| Other Inorganic Materials    | 37.11                                |
| Cellulosics                  | 42.04                                |
| Rubber                       | 8.98                                 |
| Plastics                     | 59.65                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.06                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.81E+00                                   |
| Np-237  | 5.92E-07                                   |
| Pu-238  | 3.64E-01                                   |
| Pu-239  | 2.22E+00                                   |
| Pu-240  | 1.12E+00                                   |
| Pu-241  | 1.58E+01                                   |
| Pu-242  | 1.71E-04                                   |
| Th-229  | 4.14E-17                                   |
| Th-230  | 1.39E-10                                   |
| Th-232  | 4.99E-09                                   |
| U-233   | 1.31E-12                                   |
| U-234   | 1.60E-05                                   |
| U-235   | 5.00E-07                                   |
| U-236   | 3.33E-08                                   |
| U-238   | 1.11E-05                                   |

## Haz. Waste No(s).

D007, D008, D009,  
F001, F002, F003,  
F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: RLESG-01

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                       |                       |                 |                                       |            |          |    |
|-------------|---------------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site               | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste              | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Energy Systems Group TRU Mixed Debris |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 35.4        | 0.0        | 35.4        |
| 85-gal Drum Dir Ld w/ Liner | 19.6        | 0.0        | 19.6        |
| <b>Current Form Total</b>   | <b>55.0</b> | <b>0.0</b> | <b>55.0</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 58.2        | 0.0        | 58.2        |
| <b>Final Form Total</b>     | <b>58.2</b> | <b>0.0</b> | <b>58.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 510.60                               |
| Aluminum-based Metals/Alloys    | 77.15                                |
| Other Metals                    | 7.59                                 |
| Other Inorganic Materials       | 38.97                                |
| Cellulosics                     | 95.75                                |
| Rubber                          | 41.91                                |
| Plastics                        | 96.10                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 14.01                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 17.08                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.51E-02                                   |
| Cs-137  | 1.19E-03                                   |
| Np-237  | 1.02E-07                                   |
| Pu-238  | 3.21E-02                                   |
| Pu-239  | 6.64E-01                                   |
| Pu-240  | 1.50E-01                                   |
| Pu-241  | 2.03E+00                                   |
| Pu-242  | 9.24E-06                                   |
| Sr-90   | 1.98E-03                                   |
| Th-229  | 1.03E-16                                   |
| Th-230  | 8.69E-09                                   |
| Th-232  | 1.75E-18                                   |
| U-233   | 8.38E-13                                   |
| U-234   | 2.42E-04                                   |
| U-235   | 2.46E-05                                   |
| U-236   | 1.78E-08                                   |
| U-238   | 5.05E-07                                   |

## Haz. Waste No(s).

D006, D007, D008, F001, F002, F003

## TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters. The waste is generated from R&D/R&D Laboratory Waste activities at the Rockwell International, Energy Systems Group (CA).

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.



Waste Stream ID: **RLEXX-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                          |                       |                 |                   |                                       |          |    |
|-------------|--------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Hanford (Richland) Site  | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5000                                 | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | Exxon TRU Mixed Debris   |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 41.0        | 0.0        | 41.0        |
| 85-gal Drum Dir Ld w/ Liner | 1.6         | 0.0        | 1.6         |
| <b>Current Form Total</b>   | <b>42.6</b> | <b>0.0</b> | <b>42.6</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 51.0        | 0.0        | 51.0        |
| <b>Final Form Total</b>     | <b>51.0</b> | <b>0.0</b> | <b>51.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 552.00                               |
| Aluminum-based Metals/Alloys    | 87.00                                |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 43.00                                |
| Cellulosics                     | 105.00                               |
| Rubber                          | 45.00                                |
| Plastics                        | 107.00                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 15.00                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 18.00                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.86E+00                                   |
| Cs-137  | 2.48E-03                                   |
| Np-237  | 4.60E-05                                   |
| Pu-238  | 2.26E+00                                   |
| Pu-239  | 9.77E+01                                   |
| Pu-240  | 2.18E+01                                   |
| Pu-241  | 1.39E+02                                   |
| Pu-242  | 1.32E-03                                   |
| Sr-90   | 2.27E-03                                   |
| Th-229  | 1.04E-12                                   |
| Th-230  | 1.86E-06                                   |
| Th-232  | 9.23E-15                                   |
| U-233   | 1.75E-09                                   |
| U-234   | 8.71E-03                                   |
| U-235   | 3.83E-04                                   |
| U-236   | 1.56E-05                                   |
| U-238   | 8.30E-03                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D011

## TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RLGEV-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                     | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste                    | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | GE San Jose and Vallecitos TRU Mixed Debris |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 19.3         | 0.0        | 19.3         |
| 85-gal Drum Dir Ld w/ Liner | 14.2         | 0.0        | 14.2         |
| Box - Misc                  | 182.0        | 0.0        | 182.0        |
| <b>Current Form Total</b>   | <b>215.5</b> | <b>0.0</b> | <b>215.5</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 34.5         | 0.0        | 34.5         |
| SWB Dir Ld w/ Liner         | 245.7        | 0.0        | 245.7        |
| <b>Final Form Total</b>     | <b>280.2</b> | <b>0.0</b> | <b>280.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 697.61                               |
| Aluminum-based Metals/Alloys    | 164.09                               |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 39.61                                |
| Cellulosics                     | 16.90                                |
| Rubber                          | 2.91                                 |
| Plastics                        | 29.06                                |
| Cements                         | 29.04                                |
| Inorganic Matrix                | 5.02                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 1.06                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 150.70                               |
| Packaging Material, Plastic     | 5.61                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.65E-02                                   |
| Cs-137  | 1.61E-04                                   |
| Np-237  | 7.34E-08                                   |
| Pu-238  | 3.91E-03                                   |
| Pu-239  | 1.67E-01                                   |
| Pu-240  | 3.73E-02                                   |
| Pu-241  | 2.50E-01                                   |
| Pu-242  | 2.25E-06                                   |
| Sr-90   | 1.48E-04                                   |
| Th-229  | 1.51E-15                                   |
| Th-230  | 1.98E-08                                   |
| Th-232  | 1.45E-17                                   |
| U-233   | 2.66E-12                                   |
| U-234   | 9.58E-05                                   |
| U-235   | 5.84E-06                                   |
| U-236   | 2.55E-08                                   |
| U-238   | 6.69E-05                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D011, D035

## TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **RLHMOX.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                       |                     |                   |                                       |          |    |
|-------------|-------------------------|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5120                                 | Handling | CH |
| Source Cat. | N/A                     | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                     |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes            |                   |              |
|----------------------------|-------------------|--------------|
| Container Type             | Ref. Waste Stream | Volume       |
| 55-gal POC - 12" w/ Liner  | WP-RLHMOX.001     | 182.4        |
| 55-gal POC - 12" w/o Liner | WP-RLHMOX.001     | 11.2         |
| <b>Shipped Total</b>       |                   | <b>193.6</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 17.08                                |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 0.00                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.59E+01                                   |
| Am-243  | 2.22E-06                                   |
| Cs-137  | 3.27E-06                                   |
| Np-237  | 2.12E-03                                   |
| Pu-238  | 8.75E+00                                   |
| Pu-239  | 4.00E+01                                   |
| Pu-240  | 2.03E+01                                   |
| Pu-241  | 3.22E+02                                   |
| Pu-242  | 1.01E-02                                   |
| Sr-90   | 2.94E-06                                   |
| Th-229  | 3.84E-12                                   |
| Th-230  | 1.05E-07                                   |
| Th-232  | 1.34E-16                                   |
| U-233   | 2.74E-08                                   |
| U-234   | 3.94E-03                                   |
| U-235   | 2.50E-04                                   |
| U-236   | 1.81E-06                                   |
| U-238   | 3.06E-03                                   |

## Haz. Waste No(s).

D005, D006, D007,  
D008, D011

## TRUCON Code(s)

122/222

## Waste Stream Description

N/A

Waste Stream ID: **RLIAEA-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                             | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | Source Unknown                                      | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | International Atomic Energy Agency TRU Mixed Debris |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b>     | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 552.00                               |
| Aluminum-based Metals/Alloys    | 87.00                                |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 43.00                                |
| Cellulosics                     | 105.00                               |
| Rubber                          | 45.00                                |
| Plastics                        | 107.00                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 15.00                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 18.00                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.02E-02                                   |
| Cs-137  | 3.01E-04                                   |
| Np-237  | 1.49E-07                                   |
| Pu-238  | 5.19E-03                                   |
| Pu-239  | 2.22E-01                                   |
| Pu-240  | 4.95E-02                                   |
| Pu-241  | 3.31E-01                                   |
| Pu-242  | 2.99E-06                                   |
| Sr-90   | 2.70E-04                                   |
| Th-229  | 3.28E-15                                   |
| Th-230  | 2.94E-11                                   |
| Th-232  | 1.45E-17                                   |
| U-233   | 5.69E-12                                   |
| U-234   | 3.19E-07                                   |
| U-235   | 4.37E-09                                   |
| U-236   | 2.94E-08                                   |
| U-238   | 9.02E-15                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **RLM308D.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                                       |                 |                   |            |          |    |
|-------------|-------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | N/A                     | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                     | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                      |                   |             |
|--------------------------------------|-------------------|-------------|
| Container Type                       | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/o Liner         | WP-RLM308D.001    | 4.0         |
| 55-gal POC - 12" w/ Liner            | WP-RLM308D.001    | 24.8        |
| TDOP w/ 10 - 55-gal Drums w/o Liners | WP-RLM308D.001    | 33.5        |
| <b>Shipped Total</b>                 |                   | <b>62.2</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 43.43                                |
| Aluminum-based Metals/Alloys | 0.14                                 |
| Other Metals                 | 7.80                                 |
| Other Inorganic Materials    | 7.09                                 |
| Cellulosics                  | 6.31                                 |
| Rubber                       | 2.49                                 |
| Plastics                     | 15.49                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.03E+01                                   |
| Am-243  | 1.74E-05                                   |
| Cs-137  | 6.49E-05                                   |
| Np-237  | 3.14E-04                                   |
| Pu-238  | 8.97E+00                                   |
| Pu-239  | 1.48E+01                                   |
| Pu-240  | 9.49E+00                                   |
| Pu-241  | 1.86E+02                                   |
| Pu-242  | 9.25E-03                                   |
| Sr-90   | 5.88E-05                                   |
| Th-229  | 3.70E-09                                   |
| Th-230  | 1.21E-08                                   |
| Th-232  | 1.43E-06                                   |
| U-233   | 1.97E-05                                   |
| U-234   | 6.96E-04                                   |
| U-235   | 2.30E-05                                   |
| U-236   | 5.63E-07                                   |
| U-238   | 3.65E-04                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, F001, F002, F003

## TRUCON Code(s)

117/217, 125/225

## Waste Stream Description

N/A

Waste Stream ID: **RLMHASH.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                       |                       |                   |                                       |          |    |
|-------------|-------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3111                                 | Handling | CH |
| Source Cat. | N/A                     | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                     |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes            |                   |             |
|----------------------------|-------------------|-------------|
| Container Type             | Ref. Waste Stream | Volume      |
| 55-gal POC - 12" w/ Liner  | WP-RLMHASH.001    | 61.6        |
| 55-gal POC - 12" w/o Liner | WP-RLMHASH.001    | 0.2         |
| <b>Shipped Total</b>       |                   | <b>61.8</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 16.75                                |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 0.00                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.21E+01                                   |
| Cs-137  | 6.07E-08                                   |
| Np-237  | 1.97E-05                                   |
| Pu-238  | 1.25E+00                                   |
| Pu-239  | 3.93E+01                                   |
| Pu-240  | 9.73E+00                                   |
| Pu-241  | 5.68E+01                                   |
| Pu-242  | 1.32E-03                                   |
| Sr-90   | 2.87E-08                                   |
| Th-229  | 1.31E-08                                   |
| Th-230  | 4.09E-10                                   |
| Th-232  | 1.78E-16                                   |
| U-233   | 2.80E-05                                   |
| U-234   | 1.81E-05                                   |
| U-235   | 2.04E-07                                   |
| U-236   | 1.44E-06                                   |
| U-238   | 9.93E-13                                   |

## Haz. Waste No(s).

D005, D006, D007,  
D008, D011

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A

Waste Stream ID: **RLMLB-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                    | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste                   | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Lawrence Berkeley Nat Lab TRU Mixed Debris | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b>     | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 552.00                               |
| Aluminum-based Metals/Alloys    | 87.00                                |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 43.00                                |
| Cellulosics                     | 105.00                               |
| Rubber                          | 45.00                                |
| Plastics                        | 107.00                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 15.00                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 18.00                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.87E-02                                   |
| Cs-137  | 2.13E+00                                   |
| Np-237  | 2.74E-07                                   |
| Pu-238  | 1.35E-02                                   |
| Pu-239  | 5.82E-01                                   |
| Pu-240  | 1.30E-01                                   |
| Pu-241  | 8.28E-01                                   |
| Pu-242  | 7.85E-06                                   |
| Sr-90   | 1.95E+00                                   |
| Th-229  | 6.18E-15                                   |
| Th-230  | 1.13E-10                                   |
| Th-232  | 5.48E-17                                   |
| U-233   | 1.04E-11                                   |
| U-234   | 1.01E-06                                   |
| U-235   | 1.38E-08                                   |
| U-236   | 9.24E-08                                   |
| U-238   | 2.84E-14                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **RLMLL-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                     |                                       |                 |                   |            |          |    |
|-------------|-------------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site             | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste            | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Lawrence Livermore TRU Mixed Debris | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b>     | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 552.00                               |
| Aluminum-based Metals/Alloys    | 87.00                                |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 43.00                                |
| Cellulosics                     | 105.00                               |
| Rubber                          | 45.00                                |
| Plastics                        | 107.00                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 15.00                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 18.00                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.58E-01                                   |
| Cs-137  | 1.08E-04                                   |
| Np-237  | 1.07E-06                                   |
| Pu-238  | 2.94E-02                                   |
| Pu-239  | 1.36E+00                                   |
| Pu-240  | 3.03E-01                                   |
| Pu-241  | 1.25E+00                                   |
| Pu-242  | 1.83E-05                                   |
| Sr-90   | 9.84E-05                                   |
| Th-229  | 4.78E-14                                   |
| Th-230  | 2.96E-06                                   |
| Th-232  | 2.42E-16                                   |
| U-233   | 5.77E-11                                   |
| U-234   | 9.97E-03                                   |
| U-235   | 1.78E-05                                   |
| U-236   | 2.97E-07                                   |
| U-238   | 1.11E-03                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.



Waste Stream ID: **RLMPDT.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                                       |                 |                   |            |          |    |
|-------------|-------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | N/A                     | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                     | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                      |                   |               |
|--------------------------------------|-------------------|---------------|
| Container Type                       | Ref. Waste Stream | Volume        |
| 55-gal Drum Dir Ld w/ Liner          | WP-RLMPDT.001     | 2.1           |
| 55-gal Drum Dir Ld w/o Liner         | WP-RLMPDT.001     | 260.4         |
| 55-gal POC - 12" w/ Liner            | WP-RLMPDT.001     | 32.9          |
| SWB Dir Ld w/o Liner                 | WP-RLMPDT.001     | 168.2         |
| TDOP w/ 10 - 55-gal Drums w/ Liners  | WP-RLMPDT.001     | 14.4          |
| TDOP w/ 10 - 55-gal Drums w/o Liners | WP-RLMPDT.001     | 761.6         |
| <b>Shipped Total</b>                 |                   | <b>1239.6</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 40.33                                |
| Aluminum-based Metals/Alloys | 0.15                                 |
| Other Metals                 | 2.13                                 |
| Other Inorganic Materials    | 8.47                                 |
| Cellulosics                  | 10.54                                |
| Rubber                       | 10.40                                |
| Plastics                     | 20.36                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.01                                 |
| Organic Matrix               | 0.03                                 |
| Soils/gravel                 | 0.31                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.07E+00                                   |
| Am-243  | 7.22E-07                                   |
| Cs-137  | 1.77E-05                                   |
| Np-237  | 1.04E-05                                   |
| Pu-238  | 6.41E-01                                   |
| Pu-239  | 3.97E+00                                   |
| Pu-240  | 1.29E+00                                   |
| Pu-241  | 2.03E+01                                   |
| Pu-242  | 2.69E-04                                   |
| Sr-90   | 1.60E-05                                   |
| Th-229  | 4.89E-09                                   |
| Th-230  | 2.96E-10                                   |
| Th-232  | 4.11E-10                                   |
| U-233   | 2.61E-05                                   |
| U-234   | 1.83E-05                                   |
| U-235   | 4.83E-07                                   |
| U-236   | 7.66E-08                                   |
| U-238   | 3.51E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D030

## TRUCON Code(s)

125/225, 130/230

## Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **RLMPURX.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                                       |                 |                   |            |          |    |
|-------------|-------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | N/A                     | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                     | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                      |                   |              |
|--------------------------------------|-------------------|--------------|
| Container Type                       | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/o Liner         | WP-RLMPURX.001    | 29.7         |
| TDOP w/ 10 - 55-gal Drums w/o Liners | WP-RLMPURX.001    | 76.6         |
| <b>Shipped Total</b>                 |                   | <b>106.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 42.01                                |
| Aluminum-based Metals/Alloys | 0.20                                 |
| Other Metals                 | 1.03                                 |
| Other Inorganic Materials    | 7.41                                 |
| Cellulosics                  | 6.40                                 |
| Rubber                       | 21.91                                |
| Plastics                     | 20.79                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.10                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.17E+00                                   |
| Am-243  | 1.09E-06                                   |
| Cs-137  | 8.08E-05                                   |
| Np-237  | 8.88E-06                                   |
| Pu-238  | 1.40E+00                                   |
| Pu-239  | 6.91E+00                                   |
| Pu-240  | 2.80E+00                                   |
| Pu-241  | 8.56E+01                                   |
| Pu-242  | 7.33E-04                                   |
| Sr-90   | 6.82E-05                                   |
| Th-229  | 2.22E-08                                   |
| Th-230  | 2.97E-10                                   |
| Th-232  | 1.85E-17                                   |
| U-233   | 7.91E-05                                   |
| U-234   | 1.70E-05                                   |
| U-235   | 1.81E-07                                   |
| U-236   | 2.49E-07                                   |
| U-238   | 2.46E-06                                   |

## Haz. Waste No(s).

D005, D006, D008,  
D009, D011

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: RLMSSC.001-S

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                       |                     |                   |                                       |          |    |
|-------------|-------------------------|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5123                                 | Handling | CH |
| Source Cat. | N/A                     | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                     |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes           |                   |             |
|---------------------------|-------------------|-------------|
| Container Type            | Ref. Waste Stream | Volume      |
| 55-gal POC - 12" w/ Liner | WP-RLMSSC.001     | 64.7        |
| <b>Shipped Total</b>      |                   | <b>64.7</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 49.32                                |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 0.00                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.00E+01                                   |
| Np-237  | 1.40E-05                                   |
| Pu-238  | 3.30E+00                                   |
| Pu-239  | 4.31E+01                                   |
| Pu-240  | 9.58E+00                                   |
| Pu-241  | 1.74E+02                                   |
| Pu-242  | 1.12E-03                                   |
| Th-229  | 1.83E-14                                   |
| Th-230  | 7.96E-10                                   |
| Th-232  | 1.12E-16                                   |
| U-233   | 1.32E-10                                   |
| U-234   | 4.11E-05                                   |
| U-235   | 2.70E-07                                   |
| U-236   | 1.14E-06                                   |
| U-238   | 6.08E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

122/222

## Waste Stream Description

N/A

Waste Stream ID: **RLNPDT.002-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                       |                 |                   |                                       |          |    |
|-------------|-------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5490                                 | Handling | CH |
| Source Cat. | N/A                     | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                     |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                      |                   |              |
|--------------------------------------|-------------------|--------------|
| Container Type                       | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner          | WP-RLNPDT.002     | 62.4         |
| 55-gal Drum Dir Ld w/o Liner         | WP-RLNPDT.002     | 267.9        |
| TDOP w/ 10 - 55-gal Drums w/ Liners  | WP-RLNPDT.002     | 4.8          |
| TDOP w/ 10 - 55-gal Drums w/o Liners | WP-RLNPDT.002     | 110.2        |
| <b>Shipped Total</b>                 |                   | <b>445.3</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 54.38                                |
| Aluminum-based Metals/Alloys | 0.91                                 |
| Other Metals                 | 0.78                                 |
| Other Inorganic Materials    | 24.75                                |
| Cellulosics                  | 18.89                                |
| Rubber                       | 8.30                                 |
| Plastics                     | 42.29                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.05                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.34E+00                                   |
| Am-243  | 7.83E-06                                   |
| Cs-137  | 3.23E-06                                   |
| Np-237  | 5.99E-06                                   |
| Pu-238  | 4.50E-01                                   |
| Pu-239  | 4.52E+00                                   |
| Pu-240  | 1.08E+00                                   |
| Pu-241  | 1.65E+01                                   |
| Pu-242  | 1.88E-04                                   |
| Sr-90   | 2.22E-06                                   |
| Th-229  | 2.29E-14                                   |
| Th-230  | 5.90E-10                                   |
| Th-232  | 1.40E-10                                   |
| U-233   | 1.05E-10                                   |
| U-234   | 1.64E-05                                   |
| U-235   | 3.76E-07                                   |
| U-236   | 1.60E-07                                   |
| U-238   | 9.76E-07                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **RLNPURX.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                       |                 |                   |                                       |          |    |
|-------------|-------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5490                                 | Handling | CH |
| Source Cat. | N/A                     | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                     |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                      |                   |             |
|--------------------------------------|-------------------|-------------|
| Container Type                       | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/o Liner         | WP-RLNPURX.001    | 34.3        |
| TDOP w/ 10 - 55-gal Drums w/o Liners | WP-RLNPURX.001    | 4.8         |
| <b>Shipped Total</b>                 |                   | <b>39.1</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 52.15                                |
| Aluminum-based Metals/Alloys | 1.02                                 |
| Other Metals                 | 0.99                                 |
| Other Inorganic Materials    | 18.19                                |
| Cellulosics                  | 5.87                                 |
| Rubber                       | 8.82                                 |
| Plastics                     | 25.11                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.74E+00                                   |
| Am-243  | 1.06E-06                                   |
| Cs-137  | 5.05E-05                                   |
| Np-237  | 5.41E-06                                   |
| Pu-238  | 2.56E+00                                   |
| Pu-239  | 1.05E+01                                   |
| Pu-240  | 4.10E+00                                   |
| Pu-241  | 1.70E+02                                   |
| Pu-242  | 1.28E-03                                   |
| Sr-90   | 3.23E-05                                   |
| Th-229  | 5.33E-15                                   |
| Th-230  | 5.33E-10                                   |
| Th-232  | 4.80E-17                                   |
| U-233   | 4.37E-11                                   |
| U-234   | 2.95E-05                                   |
| U-235   | 4.15E-08                                   |
| U-236   | 4.86E-07                                   |
| U-238   | 7.75E-13                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: RLPFP-01

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                            | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | 2345Z TRU Mixed Debris                             | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |                |            |                |
|-----------------------------|----------------|------------|----------------|
| Container Type              | Stored         | Proj.      | Total          |
| 55-gal Drum Dir Ld w/ Liner | 1294.4         | 0.0        | 1294.4         |
| 85-gal Drum Dir Ld w/ Liner | 571.9          | 0.0        | 571.9          |
| Box - Misc                  | 6744.5         | 0.0        | 6744.5         |
| SWB Dir Ld w/ Liner         | 56.7           | 0.0        | 56.7           |
| Uncontained                 | 267.9          | 0.0        | 267.9          |
| Uncontained                 | 3128.6         | 0.0        | 3128.6         |
| <b>Current Form Total</b>   | <b>12063.9</b> | <b>0.0</b> | <b>12063.9</b> |

| Final Form Volumes          |               |            |               |
|-----------------------------|---------------|------------|---------------|
| Container Type              | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner | 5111.8        | 0.0        | 5111.8        |
| SWB Dir Ld w/ Liner         | 2345.5        | 0.0        | 2345.5        |
| <b>Final Form Total</b>     | <b>7457.3</b> | <b>0.0</b> | <b>7457.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 609.42                               |
| Aluminum-based Metals/Alloys    | 125.12                               |
| Other Metals                    | 3.85                                 |
| Other Inorganic Materials       | 39.77                                |
| Cellulosics                     | 54.37                                |
| Rubber                          | 20.97                                |
| Plastics                        | 61.89                                |
| Cements                         | 0.01                                 |
| Inorganic Matrix                | 9.27                                 |
| Organic Matrix                  | 0.02                                 |
| Soils/gravel                    | 8.42                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 137.94                               |
| Packaging Material, Plastic     | 25.74                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.22E-02                                   |
| Cs-137  | 5.80E-03                                   |
| Pu-238  | 1.52E+01                                   |
| Pu-239  | 2.65E+00                                   |
| Pu-240  | 5.95E-01                                   |
| Pu-241  | 1.19E+01                                   |
| Pu-242  | 4.14E-05                                   |
| Sr-90   | 5.41E-03                                   |
| Th-232  | 9.70E-09                                   |
| U-233   | 6.49E-05                                   |
| U-234   | 1.32E-04                                   |
| U-235   | 2.95E-06                                   |
| U-236   | 3.17E-10                                   |
| U-238   | 5.47E-05                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D030, D043, F001, F002, F003, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the PLUTONIUM FABRICATION FACILITY.

Waste Stream ID: RLPFP-03

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                            | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3100      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | 2345Z TRU Mixed Solid Inorganic                    | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 5.6        | 0.0        | 5.6        |
| <b>Current Form Total</b>   | <b>5.6</b> | <b>0.0</b> | <b>5.6</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 6.9        | 0.0        | 6.9        |
| <b>Final Form Total</b>     | <b>6.9</b> | <b>0.0</b> | <b>6.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 3.03                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 4.66                                 |
| Other Inorganic Materials       | 3.55                                 |
| Cellulosics                     | 1.30                                 |
| Rubber                          | 0.26                                 |
| Plastics                        | 14.96                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 39.40                                |
| Organic Matrix                  | 1.69                                 |
| Soils/gravel                    | 0.15                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.29E+00                                   |
| Cs-137  | 2.25E-04                                   |
| Np-237  | 4.02E-06                                   |
| Pu-238  | 8.86E-01                                   |
| Pu-239  | 2.65E+01                                   |
| Pu-240  | 6.15E+00                                   |
| Pu-241  | 5.93E+01                                   |
| Pu-242  | 6.15E-04                                   |
| Sr-90   | 2.06E-04                                   |
| Th-229  | 1.09E-15                                   |
| Th-230  | 9.47E-11                                   |
| Th-232  | 2.91E-17                                   |
| U-233   | 1.75E-11                                   |
| U-234   | 7.79E-06                                   |
| U-235   | 9.95E-07                                   |
| U-236   | 4.77E-07                                   |
| U-238   | 7.77E-09                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019

## TRUCON Code(s)

122/222

## Waste Stream Description

The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the PLUTONIUM FABRICATION FACILITY.

Waste Stream ID: **RLPFP-04**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                     |                   |            |          |    |
|-------------|--|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                            | Final Waste Form                      | Solidified Organics | Waste Matrix Code | S3200      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | 2345Z TRU Mixed Solid Organic                      | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 14.4        | 0.0        | 14.4        |
| 85-gal Drum Dir Ld w/ Liner | 0.3         | 0.0        | 0.3         |
| <b>Current Form Total</b>   | <b>14.7</b> | <b>0.0</b> | <b>14.7</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 17.7        | 0.0        | 17.7        |
| <b>Final Form Total</b>     | <b>17.7</b> | <b>0.0</b> | <b>17.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.96                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 50.10                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.01                                 |
| Organic Matrix                  | 124.82                               |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.10E-03                                   |
| Pu-238  | 3.56E-04                                   |
| Pu-239  | 1.34E-02                                   |
| Pu-240  | 2.99E-03                                   |
| Pu-241  | 4.42E-02                                   |
| Pu-242  | 1.80E-07                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D030, D032, D033

## TRUCON Code(s)

112/212

## Waste Stream Description

The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the PLUTONIUM FABRICATION FACILITY.; and THE STREAM CONTAINS PLASTIC/POLYURETHANE, ORGANICS, CLOTH/RAGS/NYLON, RUBBER, METAL/IRON/GALVANIZED/SHEET.



Waste Stream ID: RLPFP-05

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                            | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | 2345Z TRU Nonmixed Debris                          | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 13.3        | 0.0        | 13.3        |
| 85-gal Drum Dir Ld w/ Liner | 3.2         | 0.0        | 3.2         |
| <b>Current Form Total</b>   | <b>16.5</b> | <b>0.0</b> | <b>16.5</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 18.7        | 0.0        | 18.7        |
| <b>Final Form Total</b>     | <b>18.7</b> | <b>0.0</b> | <b>18.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.05                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 120.87                               |
| Other Inorganic Materials       | 0.87                                 |
| Cellulosics                     | 2.92                                 |
| Rubber                          | 1.17                                 |
| Plastics                        | 10.61                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 13.15                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 1.79                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.01E+00                                   |
| Cs-137  | 1.92E-06                                   |
| Pu-238  | 1.86E+00                                   |
| Pu-239  | 2.02E+00                                   |
| Pu-240  | 1.01E+00                                   |
| Pu-241  | 1.36E+02                                   |
| Pu-242  | 6.45E-04                                   |
| Sr-90   | 1.74E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D030

## TRUCON Code(s)

125/225

## Waste Stream Description

The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the PLUTONIUM FABRICATION FACILITY.

Waste Stream ID: **RLPRC-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                          |                       |                 |                   |                                       |          |    |
|-------------|--------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Hanford (Richland) Site  | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5000                                 | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | CUPRC TRU Mixed Debris   |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| SWB Dir Ld w/ Liner         | 1.9        | 0.0        | 1.9        |
| <b>Current Form Total</b>   | <b>2.1</b> | <b>0.0</b> | <b>2.1</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| SWB Dir Ld w/ Liner         | 3.8        | 0.0        | 3.8        |
| <b>Final Form Total</b>     | <b>4.2</b> | <b>0.0</b> | <b>4.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 48.48                                |
| Other Inorganic Materials       | 690.56                               |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 185.92                               |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 151.25                               |
| Packaging Material, Plastic     | 4.75                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Cs-137  | 2.77E-02                                   |
| Sr-90   | 2.47E-02                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

The waste is generated from R&amp;D/R&amp;D Laboratory Waste activities at the CEER University Laboratory.

Waste Stream ID: RLPURX-01

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                       |                 |                   |                                       |          |    |
|-------------|-------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5000                                 | Handling | CH |
| Source Cat. | Other/Multiple Sources  | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | 202A TRU Mixed Debris   |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 189.7        | 0.0        | 189.7        |
| 85-gal Drum Dir Ld w/ Liner | 12.9         | 0.0        | 12.9         |
| Box - Misc                  | 176.2        | 0.0        | 176.2        |
| <b>Current Form Total</b>   | <b>378.7</b> | <b>0.0</b> | <b>378.7</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 240.7        | 0.0        | 240.7        |
| SWB Dir Ld w/ Liner         | 236.3        | 0.0        | 236.3        |
| <b>Final Form Total</b>     | <b>476.9</b> | <b>0.0</b> | <b>476.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 50.95                                |
| Aluminum-based Metals/Alloys    | 0.01                                 |
| Other Metals                    | 55.99                                |
| Other Inorganic Materials       | 13.15                                |
| Cellulosics                     | 6.34                                 |
| Rubber                          | 25.36                                |
| Plastics                        | 49.81                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 5.04                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 2.85                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 142.05                               |
| Packaging Material, Plastic     | 19.27                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.33E-01                                   |
| Cs-137  | 1.19E-04                                   |
| Pu-238  | 8.65E-02                                   |
| Pu-239  | 9.73E-01                                   |
| Pu-240  | 2.71E-01                                   |
| Pu-241  | 8.65E+00                                   |
| Pu-242  | 5.02E-05                                   |
| Sr-90   | 1.09E-04                                   |

## Haz. Waste No(s).

D005, D006, D008, D009, D011, F003

## TRUCON Code(s)

125/225

## Waste Stream Description

The waste is generated from Analytical Laboratory Waste activities at the PUREX PROCESS LABORATORY.; The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the PUREX CANYON AND SERVICE FACILITY

Waste Stream ID: RLPURX-05

## Appendix A

## TRU Waste Inventory Profile Report

|             |                          |                       |                 |                                       |            |          |    |
|-------------|--------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site  | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | Other/Multiple Sources   | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | 202A TRU Nonmixed Debris |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 528.7        | 0.0        | 528.7        |
| SWB Dir Ld w/ Liner         | 251.4        | 0.0        | 251.4        |
| <b>Current Form Total</b>   | <b>780.1</b> | <b>0.0</b> | <b>780.1</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 528.7        | 0.0        | 528.7        |
| SWB Dir Ld w/ Liner         | 251.4        | 0.0        | 251.4        |
| <b>Final Form Total</b>     | <b>780.1</b> | <b>0.0</b> | <b>780.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 593.96                               |
| Aluminum-based Metals/Alloys    | 111.93                               |
| Other Metals                    | 0.16                                 |
| Other Inorganic Materials       | 41.67                                |
| Cellulosics                     | 74.02                                |
| Rubber                          | 30.11                                |
| Plastics                        | 79.59                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 11.41                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 11.99                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 138.11                               |
| Packaging Material, Plastic     | 25.46                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.68E-01                                   |
| Cs-137  | 1.96E-02                                   |
| Np-237  | 1.39E-06                                   |
| Pu-238  | 3.27E-02                                   |
| Pu-239  | 1.13E+00                                   |
| Pu-240  | 2.53E-01                                   |
| Pu-241  | 2.97E+00                                   |
| Pu-242  | 1.52E-05                                   |
| Sr-90   | 1.80E-02                                   |
| Th-229  | 3.47E-14                                   |
| Th-230  | 2.27E-10                                   |
| Th-232  | 8.97E-17                                   |
| U-233   | 5.61E-11                                   |
| U-234   | 2.23E-06                                   |
| U-235   | 2.45E-08                                   |
| U-236   | 1.65E-07                                   |
| U-238   | 1.43E-09                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

The waste is generated from Analytical Laboratory Waste activities at the PUREX PROCESS LABORATORY.; The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the PUREX CANYON AND SERVICE FACILITY.

Waste Stream ID: RLPURX-07

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                            | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | RH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | 202A TRU RH Nonmixed Debris                        | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 30-gal Drum                 | 0.5         | 0.0        | 0.5         |
| 55-gal Drum Dir Ld w/ Liner | 20.4        | 0.0        | 20.4        |
| Box - Misc                  | 2.4         | 0.0        | 2.4         |
| <b>Current Form Total</b>   | <b>23.2</b> | <b>0.0</b> | <b>23.2</b> |

| Final Form Volumes                         |              |            |              |
|--|--------------|------------|--------------|
| Container Type                             | Stored       | Proj.      | Total        |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 113.0        | 0.0        | 113.0        |
| <b>Final Form Total</b>                    | <b>113.0</b> | <b>0.0</b> | <b>113.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 725.80                               |
| Aluminum-based Metals/Alloys    | 143.30                               |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 48.50                                |
| Cellulosics                     | 76.30                                |
| Rubber                          | 30.90                                |
| Plastics                        | 84.50                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 12.50                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 12.20                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.65E-03                                   |
| Cs-137  | 7.34E-02                                   |
| Np-237  | 4.28E-08                                   |
| Pu-238  | 1.65E-03                                   |
| Pu-239  | 1.35E-02                                   |
| Pu-240  | 6.71E-03                                   |
| Pu-241  | 8.27E-02                                   |
| Pu-242  | 1.98E-07                                   |
| Sr-90   | 6.68E-02                                   |
| Th-229  | 1.34E-15                                   |
| Th-230  | 1.92E-11                                   |
| Th-232  | 3.86E-18                                   |
| U-233   | 1.92E-12                                   |
| U-234   | 1.47E-07                                   |
| U-235   | 3.73E-10                                   |
| U-236   | 5.58E-09                                   |
| U-238   | 8.36E-16                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **RLRFETS.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                       |                       |                   |                                       |          |    |
|-------------|-------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3111                                 | Handling | CH |
| Source Cat. | N/A                     | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                     |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes           |                   |             |
|---------------------------|-------------------|-------------|
| Container Type            | Ref. Waste Stream | Volume      |
| 55-gal POC - 12" w/ Liner | WP-RLRFETS.001    | 63.4        |
| <b>Shipped Total</b>      |                   | <b>63.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 17.90                                |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 0.00                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.55E+00                                   |
| Cs-137  | 3.07E-07                                   |
| Np-237  | 1.33E-05                                   |
| Pu-238  | 1.27E+00                                   |
| Pu-239  | 5.98E+01                                   |
| Pu-240  | 9.92E+00                                   |
| Pu-241  | 8.24E+01                                   |
| Pu-242  | 1.02E-03                                   |
| Sr-90   | 3.14E-08                                   |
| Th-229  | 5.55E-08                                   |
| Th-230  | 3.93E-09                                   |
| Th-232  | 1.82E-16                                   |
| U-233   | 1.18E-04                                   |
| U-234   | 9.65E-05                                   |
| U-235   | 3.04E-06                                   |
| U-236   | 1.47E-06                                   |
| U-238   | 7.73E-13                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F005

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A

Waste Stream ID: **RLSWO-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                       |                 |                                       |            |          |    |
|-------------|-------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | Other/Multiple Sources  | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SWOC TRU Mixed Debris   |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 15.6        | 0.0        | 15.6        |
| 85-gal Drum Dir Ld w/ Liner | 2.9         | 0.0        | 2.9         |
| Uncontained                 | 17.1        | 0.0        | 17.1        |
| Uncontained                 | 19.7        | 0.0        | 19.7        |
| <b>Current Form Total</b>   | <b>55.3</b> | <b>0.0</b> | <b>55.3</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 40.8        | 0.0        | 40.8        |
| SWB Dir Ld w/ Liner         | 17.0        | 0.0        | 17.0        |
| <b>Final Form Total</b>     | <b>57.8</b> | <b>0.0</b> | <b>57.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 9.38                                 |
| Aluminum-based Metals/Alloys    | 1.45                                 |
| Other Metals                    | 59.32                                |
| Other Inorganic Materials       | 82.57                                |
| Cellulosics                     | 35.78                                |
| Rubber                          | 58.80                                |
| Plastics                        | 31.29                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.77                                 |
| Organic Matrix                  | 0.01                                 |
| Soils/gravel                    | 143.28                               |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 137.48                               |
| Packaging Material, Plastic     | 26.46                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.90E-01                                   |
| Cs-137  | 1.20E-03                                   |
| Pu-238  | 1.82E-01                                   |
| Pu-239  | 1.36E+00                                   |
| Pu-240  | 3.69E-01                                   |
| Pu-241  | 9.02E+00                                   |
| Pu-242  | 7.17E-05                                   |
| Sr-90   | 3.41E-04                                   |
| U-235   | 1.32E-09                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D030, D035, F001, F002, F003

## TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of the drum waste is combustible items such as wood, plastics, paper, absorbents, rubber and rags. Approximately 20 to 30% of the waste in drums is noncombustible waste, such as machinery, tools, glass, concrete, plumbing, fixtures.

Waste Stream ID: **RLSWO-08**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                      | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | RH |
| Source Cat. | Pollution Control or Waste Treatment Process | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SWOC TRU RH Mixed Debris                     |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Uncontained               | 28.6        | 0.0        | 28.6        |
| <b>Current Form Total</b> | <b>28.6</b> | <b>0.0</b> | <b>28.6</b> |

| Final Form Volumes                         |              |            |              |
|--|--------------|------------|--------------|
| Container Type                             | Stored       | Proj.      | Total        |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 121.0        | 0.0        | 121.0        |
| <b>Final Form Total</b>                    | <b>121.0</b> | <b>0.0</b> | <b>121.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 143.57                               |
| Other Inorganic Materials       | 1.19                                 |
| Cellulosics                     | 9.52                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 17.14                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.19                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.01E-01                                   |
| Np-237  | 1.50E-07                                   |
| Pu-238  | 2.27E-02                                   |
| Pu-239  | 9.01E-01                                   |
| Pu-240  | 2.02E-01                                   |
| Pu-241  | 2.13E+00                                   |
| Pu-242  | 1.21E-05                                   |
| Th-229  | 2.37E-16                                   |
| Th-230  | 7.44E-12                                   |
| Th-232  | 3.69E-18                                   |
| U-233   | 1.55E-12                                   |
| U-234   | 3.29E-07                                   |
| U-235   | 4.44E-09                                   |
| U-236   | 2.99E-08                                   |
| U-238   | 9.17E-15                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

## Waste Stream Description

Typically, 70 to 80% of the drum waste is combustible items such as wood, plastics, paper, absorbents, rubber and rags. Approximately 20 to 30% of the waste in drums is noncombustible waste, such as machinery, tools, glass, concrete, plumbing, fixtures.



Waste Stream ID: **RLVIPAC.001-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                       |                     |                   |                                       |          |    |
|-------------|-------------------------|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form      | Uncategorized Metal | Waste Matrix Code | S5111                                 | Handling | CH |
| Source Cat. | N/A                     | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                     |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes      |                   |             |
|----------------------|-------------------|-------------|
| Container Type       | Ref. Waste Stream | Volume      |
| SWB Dir Ld w/o Liner | WP-RLVIPAC.001    | 28.4        |
| <b>Shipped Total</b> |                   | <b>28.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 15.15                                |
| Aluminum-based Metals/Alloys | 1.68                                 |
| Other Metals                 | 1.31                                 |
| Other Inorganic Materials    | 5.22                                 |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 0.00                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.30E+00                                   |
| Cs-137  | 1.29E-05                                   |
| Np-237  | 1.95E-05                                   |
| Pu-238  | 1.00E+00                                   |
| Pu-239  | 6.30E+00                                   |
| Pu-240  | 1.87E+00                                   |
| Pu-241  | 1.01E+01                                   |
| Pu-242  | 5.57E-04                                   |
| Sr-90   | 1.18E-05                                   |
| U-234   | 3.39E-03                                   |
| U-235   | 8.88E-05                                   |
| U-238   | 1.70E-03                                   |

## Haz. Waste No(s).

D005, D006, D007,  
D008, D011

## TRUCON Code(s)

122/222

## Waste Stream Description

N/A

Waste Stream ID: **RLWAR-01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                          |                       |                 |                                       |            |          |    |
|-------------|--------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site  | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Ward TRU Mixed Debris    |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 96.7         | 0.0        | 96.7         |
| 85-gal Drum Dir Ld w/ Liner | 30.3         | 0.0        | 30.3         |
| Box - Misc                  | 228.0        | 0.0        | 228.0        |
| <b>Current Form Total</b>   | <b>355.0</b> | <b>0.0</b> | <b>355.0</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 140.8        | 0.0        | 140.8        |
| SWB Dir Ld w/ Liner         | 306.2        | 0.0        | 306.2        |
| <b>Final Form Total</b>     | <b>447.0</b> | <b>0.0</b> | <b>447.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 678.47                               |
| Aluminum-based Metals/Alloys    | 153.95                               |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 40.06                                |
| Cellulosics                     | 28.48                                |
| Rubber                          | 8.44                                 |
| Plastics                        | 39.31                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 6.33                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 3.28                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 146.35                               |
| Packaging Material, Plastic     | 12.48                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Cs-137  | 1.80E-03                                   |
| Pu-238  | 7.57E-03                                   |
| Pu-239  | 2.70E-01                                   |
| Pu-240  | 6.03E-02                                   |
| Pu-241  | 1.22E+00                                   |
| Pu-242  | 3.64E-06                                   |
| Sr-90   | 1.68E-03                                   |
| Th-232  | 1.37E-07                                   |
| U-234   | 1.26E-04                                   |
| U-235   | 7.46E-06                                   |
| U-238   | 1.75E-05                                   |

## Haz. Waste No(s).

D007, D008, D009,  
D035, F001, F002,  
F003, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing, fixtures

Waste Stream ID: **RLWTP-08**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                            | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | RH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Waste Treatment Plant TRU RH Mixed Debris          | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Uncontained               | 30.5        | 0.0        | 30.5        |
| <b>Current Form Total</b> | <b>30.5</b> | <b>0.0</b> | <b>30.5</b> |

| Final Form Volumes                         |            |              |              |
|--|------------|--------------|--------------|
| Container Type                             | Stored     | Proj.        | Total        |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 0.0        | 129.1        | 129.1        |
| <b>Final Form Total</b>                    | <b>0.0</b> | <b>129.1</b> | <b>129.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 315.47                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 83.65                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.98E+00                                   |
| Am-243  | 9.62E-04                                   |
| Cs-137  | 3.54E+03                                   |
| Np-237  | 5.31E-03                                   |
| Pu-238  | 3.43E-01                                   |
| Pu-239  | 5.47E+00                                   |
| Pu-240  | 9.34E-01                                   |
| Pu-241  | 9.46E+00                                   |
| Pu-242  | 6.39E-05                                   |
| Sr-90   | 2.50E+03                                   |
| U-233   | 3.96E-02                                   |
| U-234   | 2.59E-02                                   |
| U-235   | 1.11E-03                                   |
| U-236   | 4.15E-04                                   |
| U-238   | 2.47E-02                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

## Waste Stream Description

RH debris waste generated from future WTP operations

Waste Stream ID: SA-T001

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                        |                   |            |          |    |
|-------------|--|---------------------------------------|------------------------|-------------------|------------|----------|----|
| Site        | Sandia National Laboratory - Albuquerque | Final Waste Form                      | Heterogeneous          | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste                 | Defense Determination                 | Likely Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | CH Lovelace ITRI Debris Waste Stream     | Activity Concentrations Decayed to CY |                        |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |            |            |            |
|---|------------|------------|------------|
| Container Type                          | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner             | 5.4        | 0.0        | 5.4        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 1.0        | 0.0        | 1.0        |
| <b>Current Form Total</b>               | <b>6.4</b> | <b>0.0</b> | <b>6.4</b> |

| Final Form Volumes                      |            |            |            |
|---|------------|------------|------------|
| Container Type                          | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner             | 5.4        | 0.0        | 5.4        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 1.0        | 0.0        | 1.0        |
| <b>Final Form Total</b>                 | <b>6.4</b> | <b>0.0</b> | <b>6.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 100.00                               |
| Aluminum-based Metals/Alloys    | 3.00                                 |
| Other Metals                    | 6.00                                 |
| Other Inorganic Materials       | 15.00                                |
| Cellulosics                     | 3.00                                 |
| Rubber                          | 5.00                                 |
| Plastics                        | 5.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 40.00                                |
| Organic Matrix                  | 5.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 141.04                               |
| Packaging Material, Plastic     | 35.01                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.67E-01                                   |
| Cm-244  | 7.58E-01                                   |
| Np-237  | 3.56E-06                                   |
| Pu-238  | 3.55E-02                                   |
| Pu-239  | 5.60E-01                                   |
| Pu-240  | 1.22E-03                                   |
| Th-229  | 9.94E-14                                   |
| Th-230  | 6.94E-11                                   |
| Th-232  | 7.30E-04                                   |
| U-233   | 1.75E-10                                   |
| U-234   | 1.27E-06                                   |
| U-235   | 6.62E-09                                   |
| U-236   | 2.34E-10                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Heterogeneous CH debris laboratory waste from Pu aerosol preparation experiments

Waste Stream ID: SA-W134

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                        |                                       |            |          |    |
|-------------|--|-----------------------|------------------------|---------------------------------------|------------|----------|----|
| Site        | Sandia National Laboratory - Albuquerque           | Final Waste Form      | Heterogeneous          | Waste Matrix Code                     | S5490      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste                           | Defense Determination | Likely Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | CH Transuranic Debris Waste from Hot Cell Facility |                       |                        | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                     |             |            |             |
|--|-------------|------------|-------------|
| Container Type                           | Stored      | Proj.      | Total       |
| 10-gal Drum                              | 0.1         | 0.0        | 0.1         |
| 14-gal Drum                              | 0.1         | 0.0        | 0.1         |
| 20-gal Drum                              | 0.1         | 0.0        | 0.1         |
| 2-gal Can Stainless Steel                | 0.0         | 0.0        | 0.0         |
| 30-gal Drum                              | 0.5         | 0.0        | 0.5         |
| 55-gal Drum Dir Ld w/o Liner             | 3.7         | 0.0        | 3.7         |
| 5-gal Drum                               | 0.1         | 0.0        | 0.1         |
| 85-gal Drum w/ 1 - 55-gal Drum w/o Liner | 0.3         | 0.0        | 0.3         |
| Box - 7' x 4' x 4'                       | 12.7        | 0.0        | 12.7        |
| <b>Current Form Total</b>                | <b>17.5</b> | <b>0.0</b> | <b>17.5</b> |

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 16.0        | 0.0        | 16.0        |
| <b>Final Form Total</b>      | <b>16.0</b> | <b>0.0</b> | <b>16.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 80.00                                |
| Aluminum-based Metals/Alloys    | 5.00                                 |
| Other Metals                    | 10.00                                |
| Other Inorganic Materials       | 1.00                                 |
| Cellulosics                     | 2.00                                 |
| Rubber                          | 2.00                                 |
| Plastics                        | 5.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.49E-01                                   |
| Am-243  | 7.63E-04                                   |
| Cm-244  | 9.92E-05                                   |
| Cs-137  | 3.92E+00                                   |
| Np-237  | 7.77E-03                                   |
| Pu-238  | 8.17E-02                                   |
| Pu-239  | 8.64E-02                                   |
| Pu-240  | 2.74E-02                                   |
| Pu-241  | 3.06E-01                                   |
| Pu-242  | 7.55E-09                                   |
| Sr-90   | 3.70E+00                                   |
| Th-229  | 1.11E-07                                   |
| Th-230  | 8.42E-07                                   |
| Th-232  | 1.62E-18                                   |
| U-233   | 1.31E-04                                   |
| U-234   | 1.04E-02                                   |
| U-235   | 6.78E-04                                   |
| U-236   | 7.31E-09                                   |
| U-238   | 4.97E-04                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Heterogeneous CH Debris from SNL/NM Hot Cell Facility D&amp;D project and other miscellaneous waste generators.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: SA-W134M

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                        |                                       |            |          |    |
|-------------|--|-----------------------|------------------------|---------------------------------------|------------|----------|----|
| Site        | Sandia National Laboratory - Albuquerque             | Final Waste Form      | Heterogeneous          | Waste Matrix Code                     | S5490      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste                             | Defense Determination | Likely Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Mixed-TRU Debris Waste from SNL/NM - Contact Handled |                       |                        | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 2.1        | 0.0        | 2.1        |
| <b>Current Form Total</b>    | <b>2.1</b> | <b>0.0</b> | <b>2.1</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 2.1        | 0.0        | 2.1        |
| <b>Final Form Total</b>      | <b>2.1</b> | <b>0.0</b> | <b>2.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 80.00                                |
| Aluminum-based Metals/Alloys    | 5.00                                 |
| Other Metals                    | 10.00                                |
| Other Inorganic Materials       | 1.00                                 |
| Cellulosics                     | 2.00                                 |
| Rubber                          | 2.00                                 |
| Plastics                        | 5.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.49E-01                                   |
| Am-243  | 7.63E-04                                   |
| Cm-244  | 9.92E-05                                   |
| Cs-137  | 3.92E+00                                   |
| Np-237  | 7.77E-03                                   |
| Pu-238  | 8.17E-02                                   |
| Pu-239  | 8.64E-02                                   |
| Pu-240  | 2.74E-02                                   |
| Pu-241  | 3.06E-01                                   |
| Pu-242  | 7.55E-09                                   |
| Sr-90   | 3.70E+00                                   |
| Th-229  | 1.11E-07                                   |
| Th-230  | 8.42E-07                                   |
| Th-232  | 1.62E-18                                   |
| U-233   | 1.31E-04                                   |
| U-234   | 1.04E-02                                   |
| U-235   | 6.78E-04                                   |
| U-236   | 7.31E-09                                   |
| U-238   | 4.97E-04                                   |

## Haz. Waste No(s).

D006, D009, D011

## TRUCON Code(s)

125/225

## Waste Stream Description

Heterogeneous CH mixed debris from SNL/NM Hot Cell Facility D&amp;D project and other Miscellaneous waste generators.

Waste Stream ID: SA-W135

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                        |                                       |            |          |    |
|-------------|--|-----------------------|------------------------|---------------------------------------|------------|----------|----|
| Site        | Sandia National Laboratory - Albuquerque | Final Waste Form      | Heterogeneous          | Waste Matrix Code                     | S5490      | Handling | RH |
| Source Cat. | R&D/R&D Laboratory Waste                 | Defense Determination | Likely Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | TRU Waste from SNL/NM - Remote Handled   |                       |                        | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 0.4        | 0.0        | 0.4        |
| Cask - Lead Lined            | 3.9        | 0.0        | 3.9        |
| Lead Pig                     | 0.1        | 0.0        | 0.1        |
| <b>Current Form Total</b>    | <b>4.4</b> | <b>0.0</b> | <b>4.4</b> |

| Final Form Volumes                          |             |            |             |
|---|-------------|------------|-------------|
| Container Type                              | Stored      | Proj.      | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 19.6        | 0.0        | 19.6        |
| <b>Final Form Total</b>                     | <b>19.6</b> | <b>0.0</b> | <b>19.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 80.00                                |
| Aluminum-based Metals/Alloys    | 5.00                                 |
| Other Metals                    | 10.00                                |
| Other Inorganic Materials       | 1.00                                 |
| Cellulosics                     | 2.00                                 |
| Rubber                          | 2.00                                 |
| Plastics                        | 5.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.63E+00                                   |
| Cm-244  | 7.79E-02                                   |
| Cs-137  | 9.75E+01                                   |
| Np-237  | 2.04E-04                                   |
| Pu-238  | 8.94E-01                                   |
| Pu-239  | 6.20E-01                                   |
| Pu-240  | 9.30E-02                                   |
| Pu-241  | 4.47E-03                                   |
| Sr-90   | 9.69E+01                                   |
| Th-229  | 3.26E-12                                   |
| Th-230  | 1.30E-07                                   |
| Th-232  | 5.52E-18                                   |
| U-233   | 7.72E-09                                   |
| U-234   | 1.62E-03                                   |
| U-235   | 1.20E-04                                   |
| U-236   | 2.48E-08                                   |
| U-238   | 4.00E-05                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Heterogeneous RH debris from SNL/NM Hot Cell Facility D&amp;D Project and other miscellaneous waste generators.

Waste Stream ID: SA-W136

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                     |                                       |            |          |    |
|-------------|--|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Sandia National Laboratory - Albuquerque | Final Waste Form      | Uncategorized Metal | Waste Matrix Code                     | S5110      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste                 | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | CH TRU Debris waste from Z-machine       |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 0.6        | 4.4        | 5.0        |
| <b>Current Form Total</b>    | <b>0.6</b> | <b>4.4</b> | <b>5.0</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 0.6        | 4.4        | 5.0        |
| <b>Final Form Total</b>      | <b>0.6</b> | <b>4.4</b> | <b>5.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1830.00                              |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 45.00                                |
| Other Inorganic Materials       | 0.44                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 2.05                                 |
| Plastics                        | 1.57                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 2.55                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.57E-04                                   |
| Pu-238  | 3.38E-02                                   |
| Pu-239  | 5.71E-01                                   |
| Pu-240  | 1.31E-01                                   |
| Pu-241  | 1.11E+00                                   |
| Pu-242  | 1.52E-05                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

CH debris waste from the Z-machine, Pu ICE experiments. Waste generated at SNL/NM, but is LANL waste



Waste Stream ID: SR2001.001.00-S

## Appendix A

## TRU Waste Inventory Profile Report

|             |                     |                                       |                 |                   |            |          |    |
|-------------|---------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5300      | Handling | CH |
| Source Cat. | N/A                 | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                 | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | WP-SR2001.001.00  | 61.2        |
| <b>Shipped Total</b>        |                   | <b>61.2</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 11.89                                |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.29                                 |
| Other Inorganic Materials    | 8.37                                 |
| Cellulosics                  | 7.74                                 |
| Rubber                       | 1.00                                 |
| Plastics                     | 86.03                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.21E-02                                   |
| Cs-137  | 8.38E-08                                   |
| Np-237  | 1.63E-08                                   |
| Pu-238  | 1.77E-02                                   |
| Pu-239  | 1.58E-01                                   |
| Pu-240  | 3.14E-02                                   |
| Pu-241  | 4.66E-01                                   |
| Pu-242  | 3.16E-06                                   |
| Th-229  | 2.44E-17                                   |
| Th-230  | 5.79E-12                                   |
| Th-232  | 5.75E-19                                   |
| U-233   | 1.62E-13                                   |
| U-234   | 2.56E-07                                   |
| U-235   | 7.79E-10                                   |
| U-236   | 4.66E-09                                   |
| U-238   | 2.39E-15                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **SR2002.002.00-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                     |                       |                 |                   |                                       |          |    |
|-------------|---------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Savannah River Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5440                                 | Handling | CH |
| Source Cat. | N/A                 | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                 |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes             |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | WP-SR2002.002.00  | 69.9        |
| <b>Shipped Total</b>        |                   | <b>69.9</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 8.65                                 |
| Aluminum-based Metals/Alloys | 0.40                                 |
| Other Metals                 | 0.32                                 |
| Other Inorganic Materials    | 6.82                                 |
| Cellulosics                  | 6.82                                 |
| Rubber                       | 1.36                                 |
| Plastics                     | 81.40                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.76E-02                                   |
| Cs-137  | 2.51E-07                                   |
| Np-237  | 5.76E-08                                   |
| Pu-238  | 6.72E-03                                   |
| Pu-239  | 1.62E-01                                   |
| Pu-240  | 3.75E-02                                   |
| Pu-241  | 9.72E-01                                   |
| Pu-242  | 5.11E-06                                   |
| Sr-90   | 2.12E-08                                   |
| Th-229  | 4.75E-07                                   |
| Th-230  | 1.40E-12                                   |
| Th-232  | 4.40E-19                                   |
| U-233   | 1.27E-03                                   |
| U-234   | 7.75E-08                                   |
| U-235   | 6.41E-10                                   |
| U-236   | 4.45E-09                                   |
| U-238   | 3.09E-15                                   |

## Haz. Waste No(s).

D008, F001, F002,  
F003, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **SR-BCLCH-MT01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                       |                                       |                 |                   |            |          |    |
|-------------|-----------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site   | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | Remediation/D&D Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | JN-4 D&D Debris Waste | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner       | 11.3        | 0.0        | 11.3        |
| <b>Current Form Total</b> | <b>11.3</b> | <b>0.0</b> | <b>11.3</b> |

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner     | 11.3        | 0.0        | 11.3        |
| <b>Final Form Total</b> | <b>11.3</b> | <b>0.0</b> | <b>11.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 60.00                                |
| Aluminum-based Metals/Alloys    | 60.00                                |
| Other Metals                    | 60.00                                |
| Other Inorganic Materials       | 72.00                                |
| Cellulosics                     | 204.50                               |
| Rubber                          | 122.41                               |
| Plastics                        | 240.60                               |
| Cements                         | 62.41                                |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 36.05                                |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 1.20                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.54E+00                                   |
| Np-237  | 1.36E-06                                   |
| Pu-238  | 3.32E+02                                   |
| Pu-239  | 5.49E+00                                   |
| Pu-240  | 1.44E+00                                   |
| Pu-241  | 5.95E+01                                   |
| Pu-242  | 2.34E-04                                   |
| Th-229  | 7.87E-16                                   |
| Th-230  | 3.87E-08                                   |
| Th-232  | 9.49E-18                                   |
| U-233   | 8.56E-12                                   |
| U-234   | 2.86E-03                                   |
| U-235   | 1.62E-08                                   |
| U-236   | 1.28E-07                                   |
| U-238   | 1.06E-13                                   |

## Haz. Waste No(s).

D005, D006, D007,  
D008, D009, D011,  
F001, F002, F005No TRUCON  
Codes Provided

## Waste Stream Description

JN-1 D&D Debris Waste consists of heterogeneous debris waste generated by the activities conducted in Building JN-1. The waste includes paper, plastic, rubber, paint chips, crushed metal cans, prefilters, glass, concrete, grout, lead shot, and miscellaneous laboratory equipment

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **SR-BCLRH-MT01**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                          |                                       |                 |                   |            |          |    |
|-------------|--------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site      | Final Waste Form                      | Combustible     | Waste Matrix Code | S5390      | Handling | RH |
| Source Cat. | Remediation/D&D Waste    | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Hazardous organic debris | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Current Form Total</b>   | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

| Final Form Volumes                         |            |            |            |
|--|------------|------------|------------|
| Container Type                             | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 0.9        | 0.0        | 0.9        |
| <b>Final Form Total</b>                    | <b>0.9</b> | <b>0.0</b> | <b>0.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 28.60                                |
| Aluminum-based Metals/Alloys    | 8.40                                 |
| Other Metals                    | 101.00                               |
| Other Inorganic Materials       | 10.10                                |
| Cellulosics                     | 204.00                               |
| Rubber                          | 27.00                                |
| Plastics                        | 101.00                               |
| Cements                         | 18.50                                |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 1.70                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.06E+00                                   |
| Am-243  | 2.15E-02                                   |
| Cm-244  | 2.06E+00                                   |
| Cs-137  | 5.34E+01                                   |
| Np-237  | 2.62E-04                                   |
| Pu-238  | 2.70E+00                                   |
| Pu-239  | 3.55E-01                                   |
| Pu-240  | 5.78E-01                                   |
| Pu-241  | 4.03E+01                                   |
| Pu-242  | 1.73E-03                                   |
| Sr-90   | 3.50E+01                                   |
| Th-229  | 9.14E-12                                   |
| Th-230  | 2.70E-08                                   |
| Th-232  | 2.83E-14                                   |
| U-233   | 3.42E-08                                   |
| U-234   | 1.01E-03                                   |
| U-235   | 1.44E-05                                   |
| U-236   | 1.91E-04                                   |
| U-238   | 2.80E-04                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D019, F002, F005

## TRUCON Code(s)

321

## Waste Stream Description

Hazardous organic debris consists of the materials generated during repackaging of the waste materials generated from research and development activities conducted in Building JN-1. This waste consists primarily of iron based metals, paper, plastic, cloth, aluminum, cellulosics, rubber, and lead items (bricks, shot, apron, and gloves).

Waste Stream ID: **SR-BCLRH-T001**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                         |                                       |                     |                   |            |          |    |
|-------------|-------------------------|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Savannah River Site     | Final Waste Form                      | Solidified Organics | Waste Matrix Code | S3211      | Handling | RH |
| Source Cat. | Remediation/D&D Waste   | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Pool Water Filter Resin | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Current Form Total</b>   | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

| Final Form Volumes                         |            |            |            |
|--|------------|------------|------------|
| Container Type                             | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 0.9        | 0.0        | 0.9        |
| <b>Final Form Total</b>                    | <b>0.9</b> | <b>0.0</b> | <b>0.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 5.60                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 5.60                                 |
| Cellulosics                     | 6.70                                 |
| Rubber                          | 5.60                                 |
| Plastics                        | 6.70                                 |
| Cements                         | 33.70                                |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 129.20                               |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.13E-02                                   |
| Am-243  | 1.49E-04                                   |
| Cm-244  | 1.43E-02                                   |
| Cs-137  | 3.70E-01                                   |
| Np-237  | 1.81E-06                                   |
| Pu-238  | 1.88E-02                                   |
| Pu-239  | 2.46E-03                                   |
| Pu-240  | 4.01E-03                                   |
| Pu-241  | 2.80E-01                                   |
| Pu-242  | 1.20E-05                                   |
| Sr-90   | 2.42E-01                                   |
| Th-229  | 6.32E-14                                   |
| Th-230  | 1.88E-10                                   |
| Th-232  | 1.97E-16                                   |
| U-233   | 2.37E-10                                   |
| U-234   | 7.03E-06                                   |
| U-235   | 1.00E-07                                   |
| U-236   | 1.33E-06                                   |
| U-238   | 1.94E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D019, F002, F005

## TRUCON Code(s)

326

## Waste Stream Description

Pool Water Filter Resin consists of ion-exchange resin (nuclear grade), which was used for deionizing the Transfer/Storage Pool water. The CM-2 Regenerated Mixed Bed Resin used was contained in muslin bags (cotton bags). The matrix will also include Floor Dry (diatomaceous earth) used as an absorbent during the original packaging of this waste and 10 lbs. of absorbent (50:50 Floor Dry and Radsorb) added during repackaging to absorb any water from condensation or dewatering

Waste Stream ID: **SR-BCLRH-T002**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                  |                                       |                 |                   |            |          |    |
|-------------|----------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site              | Final Waste Form                      | Filter          | Waste Matrix Code | S5410      | Handling | RH |
| Source Cat. | Remediation/D&D Waste            | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Pool Water Prefilters and Debris | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.2        | 0.0        | 1.2        |
| <b>Current Form Total</b>   | <b>1.2</b> | <b>0.0</b> | <b>1.2</b> |

| Final Form Volumes                         |            |            |            |
|--|------------|------------|------------|
| Container Type                             | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 1.8        | 0.0        | 1.8        |
| <b>Final Form Total</b>                    | <b>1.8</b> | <b>0.0</b> | <b>1.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 8.40                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 379.30                               |
| Cellulosics                     | 8.40                                 |
| Rubber                          | 8.40                                 |
| Plastics                        | 8.40                                 |
| Cements                         | 25.30                                |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 18.50                                |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.31E-01                                   |
| Cm-244  | 2.48E-01                                   |
| Cs-137  | 4.37E-01                                   |
| Np-237  | 5.17E-07                                   |
| Pu-238  | 6.08E-01                                   |
| Pu-239  | 6.58E-02                                   |
| Pu-240  | 1.07E-01                                   |
| Sr-90   | 1.76E+01                                   |
| Th-229  | 2.54E-12                                   |
| Th-230  | 7.95E-09                                   |
| Th-232  | 8.54E-15                                   |
| U-233   | 9.04E-09                                   |
| U-234   | 2.97E-04                                   |
| U-235   | 4.38E-06                                   |
| U-236   | 5.76E-05                                   |
| U-238   | 8.34E-05                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D019, F002, F005

## TRUCON Code(s)

321

## Waste Stream Description

Pool Water Prefilters and Debris consists of the cartridge prefilters and debris generated during the change-out of resin used for filtering the Transfer/Storage Pool water. The filter matrix is composed of glass and cellulose fibers combined with melamine resin. The end caps are polypropylene and the filters are placed in the canisters with rubber gaskets (butyl/nitrile). Other debris that may be present from the original packaging may include paper (blotter paper and Floor Dry bags), plastic liners, rubber gaskets, muslin resin bags, rubber gloves, and other miscellaneous plastic, cellulosics, and metal materials. The waste matrix will also include Floor Dry and Radsorb added during repackaging to absorb any water from condensation or dewatering.

Waste Stream ID: **SR-BCLRH-T003**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                       |                                       |                 |                   |            |          |    |
|-------------|-----------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site   | Final Waste Form                      | Combustible     | Waste Matrix Code | S5390      | Handling | RH |
| Source Cat. | Remediation/D&D Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Organic Debris        | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 8.3        | 0.0        | 8.3        |
| <b>Current Form Total</b>   | <b>8.3</b> | <b>0.0</b> | <b>8.3</b> |

| Final Form Volumes                         |             |            |             |
|--|-------------|------------|-------------|
| Container Type                             | Stored      | Proj.      | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 12.5        | 0.0        | 12.5        |
| <b>Final Form Total</b>                    | <b>12.5</b> | <b>0.0</b> | <b>12.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 8.00                                 |
| Aluminum-based Metals/Alloys    | 8.00                                 |
| Other Metals                    | 1.60                                 |
| Other Inorganic Materials       | 9.60                                 |
| Cellulosics                     | 31.90                                |
| Rubber                          | 23.90                                |
| Plastics                        | 95.60                                |
| Cements                         | 17.60                                |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 1.60                                 |
| Soils/gravel                    | 1.60                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.53E-01                                   |
| Am-243  | 1.07E-03                                   |
| Cm-244  | 1.02E-01                                   |
| Cs-137  | 2.66E+00                                   |
| Np-237  | 1.30E-05                                   |
| Pu-238  | 1.34E-01                                   |
| Pu-239  | 1.77E-02                                   |
| Pu-240  | 2.88E-02                                   |
| Pu-241  | 2.01E+00                                   |
| Pu-242  | 8.63E-05                                   |
| Sr-90   | 1.74E+00                                   |
| Th-229  | 4.54E-13                                   |
| Th-230  | 1.34E-09                                   |
| Th-232  | 1.42E-15                                   |
| U-233   | 1.70E-09                                   |
| U-234   | 5.04E-05                                   |
| U-235   | 7.17E-07                                   |
| U-236   | 9.56E-06                                   |
| U-238   | 1.39E-05                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D019, F002, F005

## TRUCON Code(s)

321

## Waste Stream Description

Organic Debris consists of the materials generated during repackaging of the waste materials generated from research and development activities conducted in Building JN-1. This waste consists primarily of rubber debris material including polyethylene, polyvinyl chloride, nylon, Styrofoam, Tygon, plexiglass, and neoprene. Wood debris with no signs of hazardous waste contamination may also be included. Waste items may include non-deteriorated sheeting, hose/tubing, respirators, boots, rain suits, o-rings, electrical cords, safety glasses, plexiglass panels, plywood, and pallets. The waste matrix will also include Floor Dry and Radsorb added during repackaging to absorb any water from condensation or dewatering

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **SR-BCLRH-T004**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                       |                                       |                     |                   |            |          |    |
|-------------|-----------------------|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Savannah River Site   | Final Waste Form                      | Inorganic Non-Metal | Waste Matrix Code | S5129      | Handling | RH |
| Source Cat. | Remediation/D&D Waste | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Inorganic Debris      | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 8.1        | 0.0        | 8.1        |
| <b>Current Form Total</b>   | <b>8.1</b> | <b>0.0</b> | <b>8.1</b> |

| Final Form Volumes                         |             |            |             |
|--|-------------|------------|-------------|
| Container Type                             | Stored      | Proj.      | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 11.6        | 0.0        | 11.6        |
| <b>Final Form Total</b>                    | <b>11.6</b> | <b>0.0</b> | <b>11.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 267.10                               |
| Aluminum-based Metals/Alloys    | 121.60                               |
| Other Metals                    | 1.60                                 |
| Other Inorganic Materials       | 113.20                               |
| Cellulosics                     | 17.80                                |
| Rubber                          | 3.20                                 |
| Plastics                        | 97.00                                |
| Cements                         | 17.80                                |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 1.60                                 |
| Soils/gravel                    | 40.40                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.91E+00                                   |
| Am-243  | 3.44E-02                                   |
| Cm-244  | 3.30E+00                                   |
| Cs-137  | 8.55E+01                                   |
| Np-237  | 4.20E-04                                   |
| Pu-238  | 4.33E+00                                   |
| Pu-239  | 5.69E-01                                   |
| Pu-240  | 9.31E-01                                   |
| Pu-241  | 6.47E+01                                   |
| Pu-242  | 2.78E-03                                   |
| Sr-90   | 5.61E+01                                   |
| Th-229  | 1.47E-11                                   |
| Th-230  | 4.31E-08                                   |
| Th-232  | 4.55E-14                                   |
| U-233   | 5.49E-08                                   |
| U-234   | 1.62E-03                                   |
| U-235   | 2.32E-05                                   |
| U-236   | 3.07E-04                                   |
| U-238   | 4.50E-04                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D019, F002, F005

## TRUCON Code(s)

321

## Waste Stream Description

Inorganic Debris consists of glass and metal debris generated during repackaging of the waste materials generated from research and development activities conducted in Building JN-1. Glass debris includes laboratory glassware, windows, and various glass apparatus. Metal debris may include deteriorated berry cans, cable wire, plinches, sign, valves, piping, strapping, tools, foil, sheeting, fixtures, equipment, hardware, fuel rod cladding, and Metmounts (sectioned metal material embedded in a plastic matrix). Metals of construction include stainless steel, aluminum, iron, copper, beryllium, and zirconium alloy (Zr-2, Zr-4). The waste matrix will also include Floor Dry and Radsorb added during repackaging to absorb any water from condensation or dewatering.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.



Waste Stream ID: **SR-BCLRH-T005**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                       |                                       |                 |                   |            |          |    |
|-------------|-----------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site   | Final Waste Form                      | Filter          | Waste Matrix Code | S5410      | Handling | RH |
| Source Cat. | Remediation/D&D Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Tri-Nuc Filters       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Current Form Total</b>   | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

| Final Form Volumes                         |            |            |            |
|--|------------|------------|------------|
| Container Type                             | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 0.9        | 0.0        | 0.9        |
| <b>Final Form Total</b>                    | <b>0.9</b> | <b>0.0</b> | <b>0.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 61.70                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 22.50                                |
| Cellulosics                     | 5.60                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 39.30                                |
| Cements                         | 72.00                                |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 12.40                                |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.37E+00                                   |
| Am-243  | 3.05E-02                                   |
| Cm-244  | 2.93E+00                                   |
| Cs-137  | 7.59E+01                                   |
| Np-237  | 3.72E-04                                   |
| Pu-238  | 3.85E+00                                   |
| Pu-239  | 5.05E-01                                   |
| Pu-240  | 8.24E-01                                   |
| Pu-241  | 5.75E+01                                   |
| Pu-242  | 2.47E-03                                   |
| Sr-90   | 4.96E+01                                   |
| Th-229  | 1.30E-11                                   |
| Th-230  | 3.85E-08                                   |
| Th-232  | 4.05E-14                                   |
| U-233   | 4.86E-08                                   |
| U-234   | 1.44E-03                                   |
| U-235   | 2.06E-05                                   |
| U-236   | 2.73E-04                                   |
| U-238   | 4.00E-04                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D019, F002, F005

## TRUCON Code(s)

321

## Waste Stream Description

Tri-Nuc Filters consists of filter cartridges used in the underwater vacuum system for cleaning the surfaces and filtering the water of the Transfer/Storage Pool. The cartridges are 30" long and 6" in diameter and consist of media enclosed within a stainless steel screen shroud, and aluminum screen reinforced plastisol end caps. The filter media is composed of polypropylene, melt brown reinforced tyvar, and is available in 0.3, 1, 5, 10, and 20-micron mesh sizes. The waste matrix will also include Floor Dry (diatomaceous earth) and Radsorb (50:50 mix) added to each liner.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **SR-BCLRH-T006**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                       |                                       |                       |                   |            |          |    |
|-------------|-----------------------|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Savannah River Site   | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3150      | Handling | RH |
| Source Cat. | Remediation/D&D Waste | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Slugs                 | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes                         |            |            |            |
|--|------------|------------|------------|
| Container Type                             | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 0.9        | 0.0        | 0.9        |
| <b>Final Form Total</b>                    | <b>0.9</b> | <b>0.0</b> | <b>0.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 3.40                                 |
| Cements                         | 16.80                                |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 154.50                               |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.02E+00                                   |
| Am-243  | 7.17E-03                                   |
| Cm-244  | 6.87E-01                                   |
| Cs-137  | 1.78E+01                                   |
| Np-237  | 8.75E-05                                   |
| Pu-238  | 9.02E-01                                   |
| Pu-239  | 1.19E-01                                   |
| Pu-240  | 1.94E-01                                   |
| Pu-241  | 1.35E+01                                   |
| Pu-242  | 5.80E-04                                   |
| Sr-90   | 1.17E+01                                   |
| Th-229  | 3.06E-12                                   |
| Th-230  | 9.01E-09                                   |
| Th-232  | 9.48E-15                                   |
| U-233   | 1.14E-08                                   |
| U-234   | 3.38E-04                                   |
| U-235   | 4.84E-06                                   |
| U-236   | 6.40E-05                                   |
| U-238   | 9.37E-05                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D019, F002, F005

## TRUCON Code(s)

314

## Waste Stream Description

Slugs were produced in Alpha-Gamma Cell 7 by dissolving irradiated (burnup) fuel in an acid solution, which was then diluted several times and mixed with cement and water and allowed to solidify in Styrofoam cups. The slugs will contain only limited amounts of dissolved fuel because of the dilution. The Styrofoam cups will be segregated from the slugs prior to final packaging. The waste matrix will also include Floor Dry and Radsorb added during repackaging to absorb any water from condensation or dewatering.

Waste Stream ID: SR-BCLRH-T007

## Appendix A

## TRU Waste Inventory Profile Report

|             |                       |                                       |                       |                   |            |          |    |
|-------------|-----------------------|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Savannah River Site   | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3129      | Handling | RH |
| Source Cat. | Remediation/D&D Waste | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Laundry Sludge        | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes                         |            |            |            |
|--|------------|------------|------------|
| Container Type                             | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 0.9        | 0.0        | 0.9        |
| <b>Final Form Total</b>                    | <b>0.9</b> | <b>0.0</b> | <b>0.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 59.00                                |
| Cellulosics                     | 10.10                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 3.40                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 10.10                                |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.46E-03                                   |
| Am-243  | 5.91E-05                                   |
| Cm-244  | 5.69E-03                                   |
| Cs-137  | 1.47E-01                                   |
| Np-237  | 7.21E-07                                   |
| Pu-238  | 7.44E-03                                   |
| Pu-239  | 9.79E-04                                   |
| Pu-240  | 1.60E-03                                   |
| Pu-241  | 1.12E-01                                   |
| Pu-242  | 4.77E-06                                   |
| Sr-90   | 9.68E-02                                   |
| Th-229  | 2.52E-14                                   |
| Th-230  | 7.45E-11                                   |
| Th-232  | 7.82E-17                                   |
| U-233   | 9.42E-11                                   |
| U-234   | 2.79E-06                                   |
| U-235   | 4.00E-08                                   |
| U-236   | 5.28E-07                                   |
| U-238   | 7.74E-07                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D019, F002, F005

## TRUCON Code(s)

321

## Waste Stream Description

Laundry sludge consists of a particulate sludge (dirt, debris, and lint) generated when the laundry system still box requires cleaning. The box is heated to boil off the water contained in the particulate material. The resulting sludge is raked into plastic bags containing Radsorb (10%-20% by weight) to absorb any water from condensation or dewatering.

Waste Stream ID: **SR-BCLRH-T008**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                               |                                       |                 |                   |            |          |    |
|-------------|-------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site           | Final Waste Form                      | Filter          | Waste Matrix Code | S5410      | Handling | RH |
| Source Cat. | Remediation/D&D Waste         | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Laundry Sock Filters and Lint | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Current Form Total</b>   | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

| Final Form Volumes                         |            |            |            |
|--|------------|------------|------------|
| Container Type                             | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 0.9        | 0.0        | 0.9        |
| <b>Final Form Total</b>                    | <b>0.9</b> | <b>0.0</b> | <b>0.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 6.70                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 39.30                                |
| Cellulosics                     | 134.80                               |
| Rubber                          | 0.00                                 |
| Plastics                        | 39.30                                |
| Cements                         | 16.90                                |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 12.40                                |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.01E-01                                   |
| Am-243  | 7.06E-04                                   |
| Cm-244  | 6.79E-02                                   |
| Cs-137  | 1.76E+00                                   |
| Np-237  | 8.61E-06                                   |
| Pu-238  | 8.90E-02                                   |
| Pu-239  | 1.17E-02                                   |
| Pu-240  | 1.91E-02                                   |
| Pu-241  | 1.33E+00                                   |
| Pu-242  | 5.70E-05                                   |
| Sr-90   | 1.15E+00                                   |
| Th-229  | 3.00E-13                                   |
| Th-230  | 8.90E-10                                   |
| Th-232  | 9.35E-16                                   |
| U-233   | 1.12E-09                                   |
| U-234   | 3.34E-05                                   |
| U-235   | 4.77E-07                                   |
| U-236   | 6.31E-06                                   |
| U-238   | 9.25E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D019, F002, F005

## TRUCON Code(s)

321

## Waste Stream Description

Laundry Sock Filters and Lint are generated during the operation of the BCLDP TRU waste laundry system in the JN-1 Pump Room. This stream includes Rosedale polypropylene high-efficiency liquid filter bags and cotton lint from laundered mop heads and rags. No RCRA waste was processed through the laundry.

Waste Stream ID: **SR-BCLRH-T009**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                       |                                       |                 |                   |            |          |    |
|-------------|-----------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site   | Final Waste Form                      | Filter          | Waste Matrix Code | S5410      | Handling | RH |
| Source Cat. | Remediation/D&D Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Pressure Wash Filters | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.2        | 0.0        | 1.2        |
| <b>Current Form Total</b>   | <b>1.2</b> | <b>0.0</b> | <b>1.2</b> |

| Final Form Volumes                         |            |            |            |
|--|------------|------------|------------|
| Container Type                             | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 1.8        | 0.0        | 1.8        |
| <b>Final Form Total</b>                    | <b>1.8</b> | <b>0.0</b> | <b>1.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 22.50                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 168.60                               |
| Cellulosics                     | 42.10                                |
| Rubber                          | 8.40                                 |
| Plastics                        | 15.50                                |
| Cements                         | 35.10                                |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 91.20                                |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.40E-01                                   |
| Am-243  | 2.38E-03                                   |
| Cm-244  | 2.28E-01                                   |
| Cs-137  | 5.94E+00                                   |
| Np-237  | 2.90E-05                                   |
| Pu-238  | 3.00E-01                                   |
| Pu-239  | 3.94E-02                                   |
| Pu-240  | 6.44E-02                                   |
| Pu-241  | 4.47E+00                                   |
| Pu-242  | 1.92E-04                                   |
| Sr-90   | 3.88E+00                                   |
| Th-229  | 1.02E-12                                   |
| Th-230  | 3.00E-09                                   |
| Th-232  | 3.16E-15                                   |
| U-233   | 3.80E-09                                   |
| U-234   | 1.13E-04                                   |
| U-235   | 1.60E-06                                   |
| U-236   | 2.13E-05                                   |
| U-238   | 3.11E-05                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D019, F002, F005

## TRUCON Code(s)

321

## Waste Stream Description

Pressure Wash Filters used in the pressure wash water recovery system for filtering wash water transferred for evaporation. Three types of filter/cartridges were used. Cotton media filters consisting of cotton yarn and cotton media wound around a polypropylene core. Resin media type cartridges composed of glass and cellulose fibers combined with melamine resin, and a polypropylene sock filter consisting of polypropylene material supported by a carbon steel ring. Small quantities of sludge collected in the filter housings and settling tank bottoms are included in this waste stream. The waste matrix also includes Radsorb added to each liner.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **SR-BCLRH-T010**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                       |                       |                     |                                       |            |          |    |
|-------------|-----------------------|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Savannah River Site   | Final Waste Form      | Uncategorized Metal | Waste Matrix Code                     | S5111      | Handling | RH |
| Source Cat. | Remediation/D&D Waste | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Sabotage Pieces       |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes                         |            |            |            |
|--|------------|------------|------------|
| Container Type                             | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 0.9        | 0.0        | 0.9        |
| <b>Final Form Total</b>                    | <b>0.9</b> | <b>0.0</b> | <b>0.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 129.20                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 14.60                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 14.60                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.58E+00                                   |
| Am-243  | 7.83E-02                                   |
| Cm-244  | 3.66E+00                                   |
| Cs-137  | 7.50E+02                                   |
| Np-237  | 5.03E-03                                   |
| Pu-238  | 1.70E-02                                   |
| Pu-239  | 1.44E-03                                   |
| Pu-240  | 1.87E-02                                   |
| Pu-241  | 1.71E-01                                   |
| Pu-242  | 1.08E-05                                   |
| Sr-90   | 4.05E+02                                   |
| Th-229  | 1.46E-10                                   |
| Th-230  | 1.65E-10                                   |
| Th-232  | 1.75E-16                                   |
| U-233   | 5.52E-07                                   |
| U-234   | 6.19E-06                                   |
| U-235   | 5.45E-08                                   |
| U-236   | 1.18E-06                                   |
| U-238   | 1.45E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D019, F002, F005

## TRUCON Code(s)

321

## Waste Stream Description

Sabotage Pieces consist of materials generated during repackaging of waste generated during research and development activities conducted on sabotage testing of model casks using simulated vitrified high-level waste. This waste stream consists primarily of iron-based metals.

Waste Stream ID: **SR-BCLRH-T011**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                  |                                       |                     |                   |            |          |    |
|-------------|----------------------------------|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Savannah River Site              | Final Waste Form                      | Solidified Organics | Waste Matrix Code | S3212      | Handling | RH |
| Source Cat. | Remediation/D&D Waste            | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Hydraulic Room Sludge and Debris | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.3        | 0.0        | 2.3        |
| <b>Current Form Total</b>   | <b>2.3</b> | <b>0.0</b> | <b>2.3</b> |

| Final Form Volumes                         |            |            |            |
|--|------------|------------|------------|
| Container Type                             | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 3.6        | 0.0        | 3.6        |
| <b>Final Form Total</b>                    | <b>3.6</b> | <b>0.0</b> | <b>3.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 7.90                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 23.60                                |
| Cellulosics                     | 40.80                                |
| Rubber                          | 7.90                                 |
| Plastics                        | 40.80                                |
| Cements                         | 283.00                               |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 141.30                               |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.33E-02                                   |
| Cm-244  | 4.79E-03                                   |
| Cs-137  | 1.50E-01                                   |
| Np-237  | 1.30E-08                                   |
| Pu-238  | 7.73E-03                                   |
| Pu-239  | 2.98E-03                                   |
| Pu-240  | 1.61E-06                                   |
| Sr-90   | 8.10E-02                                   |
| Th-229  | 7.98E-18                                   |
| Th-230  | 1.54E-10                                   |
| Th-232  | 3.64E-24                                   |
| U-233   | 8.50E-14                                   |
| U-234   | 5.75E-06                                   |
| U-235   | 8.81E-12                                   |
| U-236   | 7.30E-14                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D019, F002, F005

## TRUCON Code(s)

321

## Waste Stream Description

Hydraulic Room Sludge and Debris waste consists of rubble, sludge, and absorbent materials as well as the plastic bags that the waste is in. The hydraulic sludge was absorbed using a greater than 50% No Char and Radsorb polymers. Then the hydraulic sludge was packed in plastic bags with additional No Char, Radsorb, and Floor Dry. Prior to packaging, 10 pounds of absorbent (50:50 Floor Dry and Radsorb) was added to the liner to absorb and water from condensation or dewatering.

Waste Stream ID: **SR-T001-221H-HEPA**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site                                | Final Waste Form                      | Filter          | Waste Matrix Code | S5410      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | CH HEPA filters                                    | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Box - SRS Poly Box        | 22.0        | 0.0        | 22.0        |
| <b>Current Form Total</b> | <b>22.0</b> | <b>0.0</b> | <b>22.0</b> |

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| SWB Dir Ld w/o Liner    | 62.4        | 0.0        | 62.4        |
| <b>Final Form Total</b> | <b>62.4</b> | <b>0.0</b> | <b>62.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 4790.45                              |
| Aluminum-based Metals/Alloys    | 8463.14                              |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 958.09                               |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1437.14                              |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.69E-03                                   |
| Np-237  | 4.67E-06                                   |
| Pu-238  | 5.12E+00                                   |
| Pu-239  | 4.11E-03                                   |
| Pu-240  | 2.41E-03                                   |
| Pu-241  | 5.52E-02                                   |
| Pu-242  | 2.50E-06                                   |
| Th-229  | 2.97E-13                                   |
| Th-230  | 2.85E-08                                   |
| Th-232  | 4.55E-19                                   |
| U-233   | 3.60E-10                                   |
| U-234   | 3.19E-04                                   |
| U-235   | 6.51E-11                                   |
| U-236   | 1.15E-09                                   |
| U-238   | 6.05E-15                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

119/219

## Waste Stream Description

This waste stream is defense related, contact handled non-mixed TRU and is composed of HEPA filters



Waste Stream ID: **SR-T003-773A-HET**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                       |                       |                 |                                       |            |          |    |
|-------------|---------------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Savannah River Site                   | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | RH |
| Source Cat. | R&D/R&D Laboratory Waste              | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | RH TRU Heterogeneous Debris from 773A |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |             |             |
|-----------------------------|------------|-------------|-------------|
| Container Type              | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner | 0.6        | 15.0        | 15.6        |
| <b>Current Form Total</b>   | <b>0.6</b> | <b>15.0</b> | <b>15.6</b> |

| Final Form Volumes                       |            |             |             |
|--|------------|-------------|-------------|
| Container Type                           | Stored     | Proj.       | Total       |
| RH Can w/ Fxd Lid w/ 3 - 55-gal w/ Liner | 0.9        | 21.4        | 22.3        |
| <b>Final Form Total</b>                  | <b>0.9</b> | <b>21.4</b> | <b>22.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 75.53                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 9.81                                 |
| Other Inorganic Materials       | 19.06                                |
| Cellulosics                     | 10.24                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 177.40                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.10                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 525.40                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 464.00                               |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-243  | 1.83E-03                                   |
| Cs-137  | 2.07E+00                                   |
| Pu-238  | 1.45E-01                                   |
| Pu-239  | 8.40E-07                                   |
| Sr-90   | 2.05E+00                                   |
| Th-230  | 8.20E-10                                   |
| U-234   | 8.89E-06                                   |
| U-235   | 6.77E-15                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

This waste consists of miscellaneous job control waste such as laboratory supplies used in research programs in the shielded cells, e.g. glassware, paper wipes, stainless steel samples vials, poly bottles, pipettes and small lab equipment (stirrers, heaters). In addition to the job control waste, this stream contains shavings from the cuttings of a Mark 16 fuel element.

Waste Stream ID: **SR-W026-221F-HEPA**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Savannah River Site                                | Final Waste Form      | Filter          | Waste Matrix Code                     | S5410      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | CH Mixed TRU HEPA Filters (S5000)                  |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |              |            |              |
|---------------------------|--------------|------------|--------------|
| Container Type            | Stored       | Proj.      | Total        |
| Box - SRS Poly Box        | 131.8        | 0.0        | 131.8        |
| <b>Current Form Total</b> | <b>131.8</b> | <b>0.0</b> | <b>131.8</b> |

| Final Form Volumes      |              |            |              |
|-------------------------|--------------|------------|--------------|
| Container Type          | Stored       | Proj.      | Total        |
| SWB Dir Ld w/o Liner    | 378.0        | 0.0        | 378.0        |
| <b>Final Form Total</b> | <b>378.0</b> | <b>0.0</b> | <b>378.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 47.90                                |
| Aluminum-based Metals/Alloys    | 84.62                                |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 9.58                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 14.37                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.39E-01                                   |
| Np-237  | 1.30E-06                                   |
| Pu-238  | 6.98E+00                                   |
| Pu-239  | 2.29E+00                                   |
| Pu-240  | 5.34E-01                                   |
| Pu-241  | 1.14E+01                                   |
| Pu-242  | 1.95E-04                                   |
| Th-229  | 1.26E-14                                   |
| Th-230  | 2.48E-08                                   |
| Th-232  | 1.00E-16                                   |
| U-233   | 3.21E-11                                   |
| U-234   | 3.38E-04                                   |
| U-235   | 3.61E-08                                   |
| U-236   | 2.54E-07                                   |
| U-238   | 4.88E-11                                   |

## Haz. Waste No(s).

D022, D028, D029,  
F001, F002, F003,  
F005

## TRUCON Code(s)

119/219

## Waste Stream Description

HEPA Filters in Filtered Polyethylene Boxes

Waste Stream ID: **SR-W026-221F-HET**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Savannah River Site                                | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents            | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | CH Mixed TRU/Thirds Heterogeneous debris from 221F |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |               |            |               |
|-----------------------------|---------------|------------|---------------|
| Container Type              | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner | 72.8          | 0.0        | 72.8          |
| Box - SRS B-25 OP           | 43.2          | 0.0        | 43.2          |
| Box - SRS Black Box         | 683.2         | 0.0        | 683.2         |
| Box - SRS Poly Box          | 37.6          | 0.0        | 37.6          |
| SLB2 (5' x 5' x 8) Dir Ld   | 84.9          | 0.0        | 84.9          |
| SWB Dir Ld w/ Liner         | 86.9          | 0.0        | 86.9          |
| TDOP Dir Ld                 | 57.5          | 0.0        | 57.5          |
| <b>Current Form Total</b>   | <b>1066.1</b> | <b>0.0</b> | <b>1066.1</b> |

| Final Form Volumes                  |               |            |               |
|-------------------------------------|---------------|------------|---------------|
| Container Type                      | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner         | 21.8          | 0.0        | 21.8          |
| SLB2 (5' x 5' x 8) Dir Ld           | 696.2         | 0.0        | 696.2         |
| SWB Dir Ld w/o Liner                | 194.7         | 0.0        | 194.7         |
| TDOP Dir Ld                         | 57.5          | 0.0        | 57.5          |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 119.8         | 0.0        | 119.8         |
| <b>Final Form Total</b>             | <b>1089.9</b> | <b>0.0</b> | <b>1089.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 33.10                                |
| Aluminum-based Metals/Alloys    | 0.55                                 |
| Other Metals                    | 1.10                                 |
| Other Inorganic Materials       | 5.72                                 |
| Cellulosics                     | 2.59                                 |
| Rubber                          | 8.31                                 |
| Plastics                        | 26.30                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.08                                 |
| Organic Matrix                  | 0.55                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 200.61                               |
| Packaging Material, Plastic     | 2.51                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.24E-01                                   |
| Am-243  | 6.90E-07                                   |
| Cm-244  | 1.30E-04                                   |
| Np-237  | 2.28E-06                                   |
| Pu-238  | 2.36E-01                                   |
| Pu-239  | 5.80E-01                                   |
| Pu-240  | 1.40E-01                                   |
| Pu-241  | 4.27E+00                                   |
| Pu-242  | 2.30E-04                                   |
| Th-229  | 1.59E-08                                   |
| Th-230  | 6.42E-10                                   |
| Th-232  | 2.41E-17                                   |
| U-233   | 8.50E-05                                   |
| U-234   | 3.64E-05                                   |
| U-235   | 1.20E-06                                   |
| U-236   | 2.48E-07                                   |
| U-238   | 6.60E-06                                   |

## Haz. Waste No(s).

D006, D007, D008, D009, D022, D028, D029, F001, F002, F003, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

200 Areas (F and H Separations Facilities). This waste is primarily solids consisting of mainly booties, lab coats, floor sweepings, rags, labware, and other job control wastes. Small HEPAs, liquids, sludges and resins may also be found in this stream. The waste is generated primarily through separation activities in the course of plutonium production, includes small amounts of TRU waste from on site laboratories.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **SR-W026-221F-HET-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                     |                       |                 |                   |                                       |          |    |
|-------------|---------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Savannah River Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5300                                 | Handling | CH |
| Source Cat. | N/A                 | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                 |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                    |              |
|-------------------------------------|--------------------|--------------|
| Container Type                      | Ref. Waste Stream  | Volume       |
| SWB w/ 4 - 55-gal Drums w/ Liners   | WP-SR-W026-221F-HE | 26.5         |
| SWB w/ 4 - 55-gal Drums w/o Liners  | WP-SR-W026-221F-HE | 3.8          |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-SR-W026-221F-HE | 522.1        |
| <b>Shipped Total</b>                |                    | <b>552.4</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 28.88                                |
| Aluminum-based Metals/Alloys | 0.53                                 |
| Other Metals                 | 0.24                                 |
| Other Inorganic Materials    | 5.63                                 |
| Cellulosics                  | 2.03                                 |
| Rubber                       | 7.21                                 |
| Plastics                     | 22.31                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.03                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.27E-01                                   |
| Am-243  | 9.56E-08                                   |
| Cm-244  | 1.44E-04                                   |
| Cs-137  | 4.48E-07                                   |
| Np-237  | 8.46E-06                                   |
| Pu-238  | 5.49E-01                                   |
| Pu-239  | 1.86E+00                                   |
| Pu-240  | 5.16E-01                                   |
| Pu-241  | 7.95E+00                                   |
| Pu-242  | 6.42E-05                                   |
| Sr-90   | 4.70E-07                                   |
| Th-229  | 6.77E-15                                   |
| Th-230  | 3.48E-09                                   |
| Th-232  | 6.31E-08                                   |
| U-233   | 7.25E-11                                   |
| U-234   | 1.95E-04                                   |
| U-235   | 2.60E-06                                   |
| U-236   | 3.06E-08                                   |
| U-238   | 1.63E-05                                   |

## Haz. Waste No(s).

D006, D007, D008, D009, D022, D028, D029, F001, F002, F003, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: SR-W026-221F-HOM

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                                       |                       |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Savannah River Site                     | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3113      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | CH Mixed TRU Solids (S3000)             | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 7.7        | 0.0        | 7.7        |
| <b>Current Form Total</b>   | <b>7.7</b> | <b>0.0</b> | <b>7.7</b> |

| Final Form Volumes                  |             |            |             |
|-------------------------------------|-------------|------------|-------------|
| Container Type                      | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner         | 2.3         | 0.0        | 2.3         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 14.4        | 0.0        | 14.4        |
| <b>Final Form Total</b>             | <b>16.7</b> | <b>0.0</b> | <b>16.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.57                                 |
| Cellulosics                     | 0.01                                 |
| Rubber                          | 0.01                                 |
| Plastics                        | 0.98                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 8.91                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 205.76                               |
| Packaging Material, Plastic     | 18.97                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.67E-02                                   |
| Np-237  | 1.48E-07                                   |
| Pu-238  | 6.58E-02                                   |
| Pu-239  | 2.61E-01                                   |
| Pu-240  | 4.99E-02                                   |
| Pu-241  | 6.19E-01                                   |
| Pu-242  | 5.95E-06                                   |
| Th-229  | 2.41E-15                                   |
| Th-230  | 2.84E-10                                   |
| Th-232  | 9.37E-18                                   |
| U-233   | 4.80E-12                                   |
| U-234   | 3.53E-06                                   |
| U-235   | 4.59E-09                                   |
| U-236   | 2.37E-08                                   |
| U-238   | 1.27E-10                                   |

## Haz. Waste No(s).

D022, D028, D029,  
F001, F002, F003,  
F005No TRUCON  
Codes Provided

## Waste Stream Description

Absorbed oil, neutralized acids / bases and water

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **SR-W026-772F-HET**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Savannah River Site                                | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste                           | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | CH Mixed TRU/Thirds Heterogeneous debris from 772F |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |             |              |
|-----------------------------|--------------|-------------|--------------|
| Container Type              | Stored       | Proj.       | Total        |
| 55-gal Drum Dir Ld w/ Liner | 221.9        | 28.7        | 250.6        |
| Box - SRS B-25 OP           | 10.8         | 0.0         | 10.8         |
| Box - Steel                 | 37.6         | 0.0         | 37.6         |
| SWB Dir Ld w/ Liner         | 11.3         | 0.0         | 11.3         |
| <b>Current Form Total</b>   | <b>281.7</b> | <b>28.7</b> | <b>310.4</b> |

| Final Form Volumes                  |              |             |              |
|-------------------------------------|--------------|-------------|--------------|
| Container Type                      | Stored       | Proj.       | Total        |
| 55-gal Drum Dir Ld w/ Liner         | 66.6         | 28.7        | 95.3         |
| SLB2 (5' x 5' x 8) Dir Ld           | 175.5        | 0.0         | 175.5        |
| SWB Dir Ld w/o Liner                | 11.3         | 0.0         | 11.3         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 359.3        | 0.0         | 359.3        |
| <b>Final Form Total</b>             | <b>612.6</b> | <b>28.7</b> | <b>641.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 13.80                                |
| Aluminum-based Metals/Alloys    | 1.01                                 |
| Other Metals                    | 2.78                                 |
| Other Inorganic Materials       | 27.80                                |
| Cellulosics                     | 6.95                                 |
| Rubber                          | 5.18                                 |
| Plastics                        | 68.90                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.13                                 |
| Organic Matrix                  | 0.01                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 203.27                               |
| Packaging Material, Plastic     | 14.52                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.91E-01                                   |
| Cm-244  | 1.67E-04                                   |
| Cs-137  | 7.35E-03                                   |
| Np-237  | 7.10E-04                                   |
| Pu-238  | 3.74E+01                                   |
| Pu-239  | 5.70E-01                                   |
| Pu-240  | 1.40E-01                                   |
| Pu-241  | 6.36E+00                                   |
| Pu-242  | 1.10E-04                                   |
| Sr-90   | 7.34E-03                                   |
| Th-229  | 1.20E-09                                   |
| Th-230  | 7.75E-08                                   |
| Th-232  | 6.13E-16                                   |
| U-233   | 6.41E-06                                   |
| U-234   | 4.41E-03                                   |
| U-235   | 3.20E-06                                   |
| U-236   | 6.21E-06                                   |
| U-238   | 1.10E-05                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D028, D029, F002, F003, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

Combined waste from former W027-772F-HET and T001-772F-HET. This waste stream is defense related, contact handled TRU waste and is composed of Job Control waste, sludges and resins, HEPA filters and metal equipment.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **SR-W026-772F-HET-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                     |                                       |                 |                   |            |          |    |
|-------------|---------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5300      | Handling | CH |
| Source Cat. | N/A                 | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                 | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                    |               |
|-------------------------------------|--------------------|---------------|
| Container Type                      | Ref. Waste Stream  | Volume        |
| SWB w/ 4 - 55-gal Drums w/ Liners   | WP-SR-W026-772F-HE | 32.1          |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-SR-W026-772F-HE | 1274.1        |
| <b>Shipped Total</b>                |                    | <b>1306.3</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 3.63                                 |
| Aluminum-based Metals/Alloys | 0.31                                 |
| Other Metals                 | 0.28                                 |
| Other Inorganic Materials    | 8.26                                 |
| Cellulosics                  | 1.89                                 |
| Rubber                       | 1.33                                 |
| Plastics                     | 20.51                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.07E-02                                   |
| Am-243  | 4.98E-07                                   |
| Cm-244  | 7.17E-05                                   |
| Cs-137  | 2.86E-05                                   |
| Np-237  | 5.34E-05                                   |
| Pu-238  | 2.10E+00                                   |
| Pu-239  | 2.01E-01                                   |
| Pu-240  | 5.73E-02                                   |
| Pu-241  | 9.57E-01                                   |
| Pu-242  | 9.42E-06                                   |
| Sr-90   | 2.31E-05                                   |
| Th-229  | 9.72E-09                                   |
| Th-230  | 6.33E-09                                   |
| Th-232  | 3.03E-07                                   |
| U-233   | 5.18E-05                                   |
| U-234   | 3.58E-04                                   |
| U-235   | 7.69E-07                                   |
| U-236   | 3.40E-09                                   |
| U-238   | 5.99E-07                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D028, D029, F002, F003, F005

## TRUCON Code(s)

125/225, 154

## Waste Stream Description

N/A

Waste Stream ID: SR-W027-221F-HET

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Savannah River Site   | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents                         | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | CH Mixed TRU/F listed solvents - Heterogeneous debris from 221F |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 402.1        | 0.0        | 402.1        |
| Box - SRS Black Box         | 384.3        | 0.0        | 384.3        |
| Box - SRS Poly Box          | 90.2         | 0.0        | 90.2         |
| Box - Steel                 | 52.8         | 0.0        | 52.8         |
| <b>Current Form Total</b>   | <b>929.4</b> | <b>0.0</b> | <b>929.4</b> |

| Final Form Volumes                  |               |            |               |
|-------------------------------------|---------------|------------|---------------|
| Container Type                      | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner         | 120.6         | 0.0        | 120.6         |
| SLB2 (5' x 5' x 8) Dir Ld           | 464.1         | 0.0        | 464.1         |
| SWB Dir Ld w/o Liner                | 258.9         | 0.0        | 258.9         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 646.7         | 0.0        | 646.7         |
| <b>Final Form Total</b>             | <b>1490.3</b> | <b>0.0</b> | <b>1490.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 16.20                                |
| Aluminum-based Metals/Alloys    | 0.94                                 |
| Other Metals                    | 1.22                                 |
| Other Inorganic Materials       | 6.56                                 |
| Cellulosics                     | 5.53                                 |
| Rubber                          | 13.90                                |
| Plastics                        | 49.00                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.28                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 199.08                               |
| Packaging Material, Plastic     | 9.98                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.49E+00                                   |
| Np-237  | 1.33E-06                                   |
| Pu-238  | 2.74E+00                                   |
| Pu-239  | 4.80E+00                                   |
| Pu-240  | 1.10E+00                                   |
| Pu-241  | 4.67E+01                                   |
| Pu-242  | 6.20E-04                                   |
| Th-229  | 7.83E-16                                   |
| Th-230  | 3.19E-10                                   |
| Th-232  | 7.25E-18                                   |
| U-233   | 8.47E-12                                   |
| U-234   | 2.36E-05                                   |
| U-235   | 1.47E-08                                   |
| U-236   | 9.78E-08                                   |
| U-238   | 9.90E-09                                   |

## Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D018, D019, D022, D029, D039, D040, D043, F001, F002, F003, F005, U002, U151

## TRUCON Code(s)

125/225

## Waste Stream Description

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste. This stream differs from SR-W026 because solvent rags are suspected to be in the waste.



Waste Stream ID: **SR-W027-221F-HETA-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                     |                                       |                 |                   |            |          |    |
|-------------|---------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5440      | Handling | CH |
| Source Cat. | N/A                 | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                 | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                    |               |
|-------------------------------------|--------------------|---------------|
| Container Type                      | Ref. Waste Stream  | Volume        |
| 55-gal Drum Dir Ld w/ Liner         | WP-SR-W027-221F-HE | 164.9         |
| SWB w/ 4 - 55-gal Drums w/ Liners   | WP-SR-W027-221F-HE | 213.6         |
| SWB w/ 4 - 55-gal Drums w/o Liners  | WP-SR-W027-221F-HE | 1.9           |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-SR-W027-221F-HE | 1700.5        |
| <b>Shipped Total</b>                |                    | <b>2080.9</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 8.18                                 |
| Aluminum-based Metals/Alloys | 0.42                                 |
| Other Metals                 | 0.07                                 |
| Other Inorganic Materials    | 3.48                                 |
| Cellulosics                  | 4.68                                 |
| Rubber                       | 3.26                                 |
| Plastics                     | 32.87                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.01                                 |
| Organic Matrix               | 0.01                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.55E-01                                   |
| Am-243  | 2.14E-09                                   |
| Cs-137  | 2.29E-04                                   |
| Np-237  | 4.00E-06                                   |
| Pu-238  | 9.60E-02                                   |
| Pu-239  | 8.13E-01                                   |
| Pu-240  | 2.67E-01                                   |
| Pu-241  | 5.10E+00                                   |
| Pu-242  | 4.46E-05                                   |
| Sr-90   | 6.21E-08                                   |
| Th-229  | 2.35E-09                                   |
| Th-230  | 3.23E-09                                   |
| Th-232  | 4.78E-08                                   |
| U-233   | 8.33E-06                                   |
| U-234   | 1.20E-04                                   |
| U-235   | 5.94E-08                                   |
| U-236   | 2.38E-08                                   |
| U-238   | 1.04E-06                                   |

## Haz. Waste No(s).

D008, F001, F002,  
F003, F005

## TRUCON Code(s)

125/225, 154

## Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **SR-W027-221H-HEPA**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site                                | Final Waste Form                      | Filter          | Waste Matrix Code | S5410      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | CH TRU HEPA filters                                | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Box - SRS Poly Box        | 48.0        | 0.0        | 48.0        |
| <b>Current Form Total</b> | <b>48.0</b> | <b>0.0</b> | <b>48.0</b> |

| Final Form Volumes      |              |            |              |
|-------------------------|--------------|------------|--------------|
| Container Type          | Stored       | Proj.      | Total        |
| SWB Dir Ld w/o Liner    | 138.0        | 0.0        | 138.0        |
| <b>Final Form Total</b> | <b>138.0</b> | <b>0.0</b> | <b>138.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 47.86                                |
| Aluminum-based Metals/Alloys    | 84.56                                |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 9.57                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 14.36                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.10E-02                                   |
| Np-237  | 3.73E-04                                   |
| Pu-238  | 1.09E+02                                   |
| Pu-239  | 1.17E-01                                   |
| Pu-240  | 5.12E-02                                   |
| Pu-241  | 2.69E+00                                   |
| Pu-242  | 5.09E-05                                   |
| U-234   | 4.06E-05                                   |
| U-235   | 5.92E-07                                   |
| U-236   | 7.37E-06                                   |
| U-238   | 2.36E-08                                   |

## Haz. Waste No(s).

D006, D008, D009, D019, D022, D029, D035, D039, D040, D043

## TRUCON Code(s)

119/219

## Waste Stream Description

This waste stream is defense related, contact handled mixed TRU and is composed of HEPA filters

Waste Stream ID: **SR-W027-221H-HET-A**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Savannah River Site   | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents                         | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | CH Mixed TRU/F listed solvents - Heterogeneous debris from 221H |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |               |              |               |
|-----------------------------|---------------|--------------|---------------|
| Container Type              | Stored        | Proj.        | Total         |
| 55-gal Drum Dir Ld w/ Liner | 435.8         | 163.7        | 599.5         |
| Box - FRP                   | 10.7          | 0.0          | 10.7          |
| Box - SRS B-25 OP           | 28.8          | 0.0          | 28.8          |
| Box - Steel                 | 32.9          | 0.0          | 32.9          |
| Cask - Misc                 | 14.3          | 0.0          | 14.3          |
| Cask - SRS CMISC            | 1.2           | 0.0          | 1.2           |
| SLB2 (5' x 5' x 8) Dir Ld   | 962.2         | 254.7        | 1216.9        |
| SWB Dir Ld w/ Liner         | 62.4          | 24.6         | 86.9          |
| <b>Current Form Total</b>   | <b>1548.2</b> | <b>443.0</b> | <b>1991.2</b> |

| Final Form Volumes                  |               |              |               |
|-------------------------------------|---------------|--------------|---------------|
| Container Type                      | Stored        | Proj.        | Total         |
| 55-gal Drum Dir Ld w/ Liner         | 130.8         | 163.7        | 294.5         |
| SLB2 (5' x 5' x 8) Dir Ld           | 1216.9        | 254.7        | 1471.6        |
| SWB Dir Ld w/o Liner                | 86.9          | 24.6         | 111.5         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 704.1         | 0.0          | 704.1         |
| <b>Final Form Total</b>             | <b>2138.8</b> | <b>443.0</b> | <b>2581.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.18                                 |
| Aluminum-based Metals/Alloys    | 0.04                                 |
| Other Metals                    | 0.67                                 |
| Other Inorganic Materials       | 0.42                                 |
| Cellulosics                     | 1.65                                 |
| Rubber                          | 2.96                                 |
| Plastics                        | 7.29                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.41                                 |
| Organic Matrix                  | 0.34                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 204.22                               |
| Packaging Material, Plastic     | 8.61                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.92E-02                                   |
| Am-243  | 1.10E-07                                   |
| Cs-137  | 8.21E-03                                   |
| Np-237  | 2.90E-03                                   |
| Pu-238  | 9.84E+01                                   |
| Pu-239  | 2.40E-01                                   |
| Pu-240  | 9.30E-02                                   |
| Pu-241  | 2.45E+00                                   |
| Pu-242  | 5.40E-05                                   |
| Sr-90   | 8.20E-03                                   |
| Th-229  | 3.77E-10                                   |
| Th-230  | 1.28E-08                                   |
| Th-232  | 1.98E-15                                   |
| U-233   | 2.03E-06                                   |
| U-234   | 9.93E-04                                   |
| U-235   | 8.80E-06                                   |
| U-236   | 2.00E-05                                   |
| U-238   | 2.10E-06                                   |

## Haz. Waste No(s).

D006, D008, D009, D019, D022, D029, D039, D040, D043, F001, F002, F003, F005, U133

## TRUCON Code(s)

125/225

## Waste Stream Description

This waste stream has been separated from its parent waste stream SR-W027-221H-HET waste. This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste. This stream differs from SR-W026 because solvent rags are suspected to be in the waste. Small HEPA filters, sludges, resins, absorbed liquids, and large metal equipment are also in these waste streams

Waste Stream ID: **SR-W027-221H-HET-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                     |                       |                 |                   |                                       |          |    |
|-------------|---------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Savannah River Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5440                                 | Handling | CH |
| Source Cat. | N/A                 | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                 |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                      |                    |               |
|--------------------------------------|--------------------|---------------|
| Container Type                       | Ref. Waste Stream  | Volume        |
| SWB w/ 4 - 55-gal Drums w/ Liners    | WP-SR-W027-221H-HE | 313.7         |
| TDOP w/ 10 - 55-gal Drums w/ Liners  | WP-SR-W027-221H-HE | 2203.4        |
| TDOP w/ 10 - 55-gal Drums w/o Liners | WP-SR-W027-221H-HE | 4.8           |
| <b>Shipped Total</b>                 |                    | <b>2521.9</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 8.00                                 |
| Aluminum-based Metals/Alloys | 0.45                                 |
| Other Metals                 | 0.14                                 |
| Other Inorganic Materials    | 3.16                                 |
| Cellulosics                  | 2.45                                 |
| Rubber                       | 6.57                                 |
| Plastics                     | 23.47                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.01                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.99E-02                                   |
| Am-243  | 8.11E-06                                   |
| Cs-137  | 4.23E-06                                   |
| Np-237  | 8.24E-05                                   |
| Pu-238  | 1.51E+01                                   |
| Pu-239  | 5.17E-02                                   |
| Pu-240  | 2.03E-02                                   |
| Pu-241  | 2.02E+00                                   |
| Pu-242  | 9.72E-06                                   |
| Sr-90   | 4.22E-06                                   |
| Th-229  | 6.73E-09                                   |
| Th-230  | 4.92E-08                                   |
| Th-232  | 1.08E-06                                   |
| U-233   | 3.59E-05                                   |
| U-234   | 2.78E-03                                   |
| U-235   | 6.16E-07                                   |
| U-236   | 1.21E-09                                   |
| U-238   | 9.86E-07                                   |

## Haz. Waste No(s).

D006, D008, D009, D019, D022, D029, D039, D040, D043, F001, F002, F003, F005, U133

## TRUCON Code(s)

125/225, 154

## Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **SR-W027-235F-HET**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Savannah River Site   | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents                         | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | CH Mixed TRU/F listed solvents - Heterogeneous debris from 235F |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 191.6        | 0.0        | 191.6        |
| Box - SRS Black Box         | 42.7         | 0.0        | 42.7         |
| Box - SRS Poly Box          | 22.4         | 0.0        | 22.4         |
| Box - Steel                 | 28.2         | 0.0        | 28.2         |
| Cask - SRS CMISC            | 1.2          | 0.0        | 1.2          |
| MSMS                        | 13.3         | 0.0        | 13.3         |
| SWB Dir Ld w/ Liner         | 28.4         | 0.0        | 28.4         |
| <b>Current Form Total</b>   | <b>327.7</b> | <b>0.0</b> | <b>327.7</b> |

| Final Form Volumes                  |              |            |              |
|-------------------------------------|--------------|------------|--------------|
| Container Type                      | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner         | 57.4         | 0.0        | 57.4         |
| SLB2 (5' x 5' x 8) Dir Ld           | 277.3        | 0.0        | 277.3        |
| SWB Dir Ld w/o Liner                | 92.6         | 0.0        | 92.6         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 306.6        | 0.0        | 306.6        |
| <b>Final Form Total</b>             | <b>733.9</b> | <b>0.0</b> | <b>733.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 55.00                                |
| Aluminum-based Metals/Alloys    | 0.79                                 |
| Other Metals                    | 0.98                                 |
| Other Inorganic Materials       | 9.20                                 |
| Cellulosics                     | 13.00                                |
| Rubber                          | 25.00                                |
| Plastics                        | 92.00                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.02                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 202.27                               |
| Packaging Material, Plastic     | 9.62                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.58E-02                                   |
| Np-237  | 7.00E-03                                   |
| Pu-238  | 3.17E+02                                   |
| Pu-239  | 3.50E-01                                   |
| Pu-240  | 1.70E-01                                   |
| Pu-241  | 4.00E+01                                   |
| Pu-242  | 4.00E-04                                   |
| Th-229  | 4.53E-12                                   |
| Th-230  | 6.23E-09                                   |
| Th-232  | 1.04E-15                                   |
| U-233   | 6.35E-08                                   |
| U-234   | 1.14E-03                                   |
| U-235   | 1.80E-06                                   |
| U-236   | 2.10E-05                                   |
| U-238   | 1.90E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D035, F002, F003

## TRUCON Code(s)

125/225

## Waste Stream Description

This waste stream is defense related contact handled mixed TRU waste. This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste, small HEPAs, liquids, sludges and resins may also be found in this stream..

Waste Stream ID: **SR-W027-235F-HET-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                     |                                       |                 |                   |            |          |    |
|-------------|---------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | N/A                 | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                 | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                    |              |
|-------------------------------------|--------------------|--------------|
| Container Type                      | Ref. Waste Stream  | Volume       |
| SWB w/ 4 - 55-gal Drums w/ Liners   | WP-SR-W027-235F-HE | 18.9         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-SR-W027-235F-HE | 282.6        |
| <b>Shipped Total</b>                |                    | <b>301.5</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 15.31                                |
| Aluminum-based Metals/Alloys | 0.22                                 |
| Other Metals                 | 0.19                                 |
| Other Inorganic Materials    | 2.81                                 |
| Cellulosics                  | 3.52                                 |
| Rubber                       | 6.47                                 |
| Plastics                     | 24.93                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.58E-02                                   |
| Am-243  | 3.70E-08                                   |
| Cs-137  | 5.33E-07                                   |
| Np-237  | 1.19E-04                                   |
| Pu-238  | 7.14E+00                                   |
| Pu-239  | 3.20E-02                                   |
| Pu-240  | 2.17E-02                                   |
| Pu-241  | 1.30E+00                                   |
| Pu-242  | 1.11E-05                                   |
| Sr-90   | 5.33E-07                                   |
| Th-229  | 2.43E-14                                   |
| Th-230  | 1.25E-08                                   |
| Th-232  | 8.33E-07                                   |
| U-233   | 5.19E-10                                   |
| U-234   | 1.40E-03                                   |
| U-235   | 2.49E-06                                   |
| U-236   | 6.43E-10                                   |
| U-238   | 2.99E-07                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D035, F002, F003

## TRUCON Code(s)

125/225, 154

## Waste Stream Description

N/A

Waste Stream ID: **SR-W027-235F-HOMO**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                     |                                       |            |          |    |
|-------------|--|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Savannah River Site                                | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code                     | S3000      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | CH mixed TRU S3000 solids from 235F                |                       |                     | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 3.7        | 0.0        | 3.7        |
| <b>Current Form Total</b>   | <b>3.7</b> | <b>0.0</b> | <b>3.7</b> |

| Final Form Volumes                  |            |            |            |
|-------------------------------------|------------|------------|------------|
| Container Type                      | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner         | 1.0        | 0.0        | 1.0        |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 4.8        | 0.0        | 4.8        |
| <b>Final Form Total</b>             | <b>5.8</b> | <b>0.0</b> | <b>5.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 21.68                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 287.55                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 202.20                               |
| Packaging Material, Plastic     | 19.83                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.79E-01                                   |
| Np-237  | 7.05E-07                                   |
| Pu-238  | 2.03E+02                                   |
| Pu-239  | 1.61E-01                                   |
| Pu-240  | 8.74E-02                                   |
| Pu-241  | 2.30E+00                                   |
| Pu-242  | 1.03E-04                                   |
| Th-229  | 9.26E-15                                   |
| Th-230  | 6.32E-07                                   |
| Th-232  | 1.44E-17                                   |
| U-233   | 2.08E-11                                   |
| U-234   | 9.20E-03                                   |
| U-235   | 2.38E-09                                   |
| U-236   | 3.89E-08                                   |
| U-238   | 2.34E-13                                   |

## Haz. Waste No(s).

D004, D006, D007, D008, D009, D010, D011

No TRUCON Codes Provided

## Waste Stream Description

This waste consists of sludge from tank cleanup.

Waste Stream ID: **SR-W027-773A-HET**

## Appendix A

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                                       |            |          |    |
|-------------|---|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Savannah River Site   | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste  | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | CH Mixed TRU/F listed solvents - Heterogeneous debris from 773A |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |              |              |
|-----------------------------|--------------|--------------|--------------|
| Container Type              | Stored       | Proj.        | Total        |
| 55-gal Drum Dir Ld w/ Liner | 162.9        | 207.2        | 370.0        |
| Box - FRP                   | 4.1          | 0.0          | 4.1          |
| Box - Misc                  | 6.2          | 0.0          | 6.2          |
| Box - SRS B-25 OP           | 7.2          | 0.0          | 7.2          |
| Box - SRS Poly Box          | 3.5          | 0.0          | 3.5          |
| Box - Steel                 | 56.4         | 0.0          | 56.4         |
| Cask - Misc                 | 63.7         | 0.0          | 63.7         |
| Cask - SRS CMISC            | 3.6          | 0.0          | 3.6          |
| PMISC                       | 4.9          | 0.0          | 4.9          |
| <b>Current Form Total</b>   | <b>312.5</b> | <b>207.2</b> | <b>519.7</b> |

| Final Form Volumes                  |              |              |               |
|-------------------------------------|--------------|--------------|---------------|
| Container Type                      | Stored       | Proj.        | Total         |
| 55-gal Drum Dir Ld w/ Liner         | 48.9         | 207.2        | 256.0         |
| SLB2 (5' x 5' x 8) Dir Ld           | 560.3        | 0.0          | 560.3         |
| SWB Dir Ld w/o Liner                | 18.9         | 0.0          | 18.9          |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 263.5        | 0.0          | 263.5         |
| <b>Final Form Total</b>             | <b>891.6</b> | <b>207.2</b> | <b>1098.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 95.30                                |
| Aluminum-based Metals/Alloys    | 4.55                                 |
| Other Metals                    | 11.80                                |
| Other Inorganic Materials       | 47.10                                |
| Cellulosics                     | 27.90                                |
| Rubber                          | 16.40                                |
| Plastics                        | 99.90                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.30                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 195.63                               |
| Packaging Material, Plastic     | 12.48                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.88E-03                                   |
| Am-243  | 1.40E-02                                   |
| Cm-244  | 1.35E+00                                   |
| Cs-137  | 3.22E-01                                   |
| Np-237  | 3.17E-10                                   |
| Pu-238  | 7.64E+00                                   |
| Pu-239  | 1.30E-01                                   |
| Pu-240  | 3.51E-02                                   |
| Pu-241  | 1.14E+00                                   |
| Pu-242  | 4.10E-04                                   |
| Pu-244  | 4.66E-16                                   |
| Sr-90   | 3.22E-01                                   |
| Th-229  | 1.78E-09                                   |
| Th-230  | 2.69E-10                                   |
| Th-232  | 3.30E-07                                   |
| U-233   | 1.90E-05                                   |
| U-234   | 4.08E-05                                   |
| U-235   | 5.60E-07                                   |
| U-236   | 3.30E-06                                   |
| U-238   | 1.20E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D043, F002, F003, F004, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

This waste stream is defense related contact handled mixed TRU waste. This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, other job control waste, small HEPAs liquids, sludges and resins may also be found in this waste.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.



Waste Stream ID: **SR-W027-773A-HET-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                     |                                       |                 |                   |            |          |    |
|-------------|---------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | N/A                 | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                 | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                      |                    |              |
|--------------------------------------|--------------------|--------------|
| Container Type                       | Ref. Waste Stream  | Volume       |
| SWB w/ 4 - 55-gal Drums w/ Liners    | WP-SR-W027-773A-HE | 3.8          |
| TDOP w/ 10 - 55-gal Drums w/ Liners  | WP-SR-W027-773A-HE | 340.1        |
| TDOP w/ 10 - 55-gal Drums w/o Liners | WP-SR-W027-773A-HE | 14.4         |
| <b>Shipped Total</b>                 |                    | <b>358.2</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 14.48                                |
| Aluminum-based Metals/Alloys | 0.25                                 |
| Other Metals                 | 0.54                                 |
| Other Inorganic Materials    | 7.37                                 |
| Cellulosics                  | 3.81                                 |
| Rubber                       | 2.40                                 |
| Plastics                     | 15.49                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.45E-02                                   |
| Am-243  | 6.96E-04                                   |
| Cm-244  | 3.69E-02                                   |
| Cs-137  | 6.16E-05                                   |
| Np-237  | 9.53E-05                                   |
| Pu-238  | 5.15E+00                                   |
| Pu-239  | 2.52E-01                                   |
| Pu-240  | 6.16E-02                                   |
| Pu-241  | 1.24E+00                                   |
| Pu-242  | 6.62E-06                                   |
| Sr-90   | 6.16E-05                                   |
| Th-229  | 1.95E-14                                   |
| Th-230  | 8.32E-09                                   |
| Th-232  | 3.67E-07                                   |
| U-233   | 4.15E-10                                   |
| U-234   | 9.32E-04                                   |
| U-235   | 4.72E-07                                   |
| U-236   | 1.83E-09                                   |
| U-238   | 4.18E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D043, F002, F003, F004, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **SR-W027-999-AGNS-HET**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                          |                       |                        |                                       |            |          |    |
|-------------|--------------------------|-----------------------|------------------------|---------------------------------------|------------|----------|----|
| Site        | Savannah River Site      | Final Waste Form      | Heterogeneous          | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste | Defense Determination | Likely Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SR-AGNS-HET Debris       |                       |                        | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 29.5        | 0.0        | 29.5        |
| <b>Current Form Total</b>   | <b>29.5</b> | <b>0.0</b> | <b>29.5</b> |

| Final Form Volumes                  |             |            |             |
|-------------------------------------|-------------|------------|-------------|
| Container Type                      | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner         | 8.9         | 0.0        | 8.9         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 47.9        | 0.0        | 47.9        |
| <b>Final Form Total</b>             | <b>56.8</b> | <b>0.0</b> | <b>56.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 29.99                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 3.17                                 |
| Other Inorganic Materials       | 22.29                                |
| Cellulosics                     | 25.12                                |
| Rubber                          | 6.45                                 |
| Plastics                        | 25.92                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.23                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 204.03                               |
| Packaging Material, Plastic     | 19.39                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.17E-02                                   |
| Np-237  | 9.37E-05                                   |
| Pu-238  | 5.94E-02                                   |
| Pu-239  | 1.14E-01                                   |
| Pu-240  | 3.44E-02                                   |
| Pu-241  | 5.07E-01                                   |
| Pu-242  | 4.21E-06                                   |
| Th-229  | 1.28E-11                                   |
| Th-230  | 2.34E-09                                   |
| Th-232  | 1.77E-15                                   |
| U-233   | 1.06E-08                                   |
| U-234   | 1.23E-05                                   |
| U-235   | 3.01E-07                                   |
| U-236   | 1.39E-06                                   |
| U-238   | 4.35E-09                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D019, D022, D029, F002, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

This waste is comprised of numerous organic and inorganic debris waste and generally consists of paper, cloth, wood, plastic, rubber, glass, and metal.

Waste Stream ID: **SR-W027-999-AGNS-HOM**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                          |                       |                        |                                       |            |          |    |
|-------------|--------------------------|-----------------------|------------------------|---------------------------------------|------------|----------|----|
| Site        | Savannah River Site      | Final Waste Form      | Solidified Inorganics  | Waste Matrix Code                     | S3000      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste | Defense Determination | Likely Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SR-AGNS-HOM              |                       |                        | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 3.3        | 0.0        | 3.3        |
| <b>Current Form Total</b>   | <b>3.3</b> | <b>0.0</b> | <b>3.3</b> |

| Final Form Volumes                  |            |            |            |
|-------------------------------------|------------|------------|------------|
| Container Type                      | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner         | 1.0        | 0.0        | 1.0        |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 4.8        | 0.0        | 4.8        |
| <b>Final Form Total</b>             | <b>5.8</b> | <b>0.0</b> | <b>5.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 61.52                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 2300.00                              |
| Inorganic Matrix                | 816.06                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 202.20                               |
| Packaging Material, Plastic     | 19.83                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.66E+00                                   |
| Np-237  | 5.36E-04                                   |
| Pu-238  | 5.00E-01                                   |
| Pu-239  | 1.04E+00                                   |
| Pu-240  | 2.44E-01                                   |
| Pu-241  | 3.17E+00                                   |
| Pu-242  | 4.23E-05                                   |
| Th-229  | 7.17E-11                                   |
| Th-230  | 2.05E-08                                   |
| Th-232  | 1.21E-16                                   |
| U-233   | 5.93E-08                                   |
| U-234   | 1.08E-04                                   |
| U-235   | 3.35E-06                                   |
| U-236   | 1.89E-07                                   |
| U-238   | 7.11E-05                                   |

## Haz. Waste No(s).

D004, D005, D006,  
D007, D008, D009,  
D011, F005

## TRUCON Code(s)

111/211

## Waste Stream Description

This waste is comprised of aqueous liquids solidified with lime and cement in a 55-gallon drum and aqueous liquid that had been absorbed using Florco-X and then later solidified with cement and water inside a 55-gallon drum.

Waste Stream ID: **SR-W027-999-LASL-HET**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                 |                       |                        |                   |                                       |          |    |
|-------------|---------------------------------|-----------------------|------------------------|-------------------|---------------------------------------|----------|----|
| Site        | Savannah River Site             | Final Waste Form      | Heterogeneous          | Waste Matrix Code | S5000                                 | Handling | CH |
| Source Cat. | Source Information Not Compiled | Defense Determination | Likely Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | CH Mixed TRU Debris (S5000)     |                       |                        |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| 30-gal Drum               | 24.1        | 0.0        | 24.1        |
| <b>Current Form Total</b> | <b>24.1</b> | <b>0.0</b> | <b>24.1</b> |

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 44.3        | 0.0        | 44.3        |
| <b>Final Form Total</b>      | <b>44.3</b> | <b>0.0</b> | <b>44.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 58.44                                |
| Aluminum-based Metals/Alloys    | 0.83                                 |
| Other Metals                    | 1.04                                 |
| Other Inorganic Materials       | 9.81                                 |
| Cellulosics                     | 13.57                                |
| Rubber                          | 26.51                                |
| Plastics                        | 97.26                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.02                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.96E+00                                   |
| Np-237  | 3.63E-05                                   |
| Pu-238  | 1.30E+03                                   |
| Pu-239  | 1.20E+00                                   |
| Pu-240  | 7.57E-01                                   |
| Pu-241  | 1.50E+01                                   |
| Pu-242  | 8.70E-04                                   |
| Th-229  | 2.44E-12                                   |
| Th-230  | 2.30E-05                                   |
| Th-232  | 6.42E-16                                   |
| U-233   | 2.44E-09                                   |
| U-234   | 1.44E-01                                   |
| U-235   | 4.02E-08                                   |
| U-236   | 7.65E-07                                   |
| U-238   | 4.46E-12                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste.

Waste Stream ID: **SR-W027-999-LASL-HOM**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                 |                       |                        |                   |                                       |          |    |
|-------------|---------------------------------|-----------------------|------------------------|-------------------|---------------------------------------|----------|----|
| Site        | Savannah River Site             | Final Waste Form      | Solidified Inorganics  | Waste Matrix Code | S3000                                 | Handling | CH |
| Source Cat. | Source Information Not Compiled | Defense Determination | Likely Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | CH Mixed TRU Solids (S3000)     |                       |                        |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| 30-gal Drum               | 3.2        | 0.0        | 3.2        |
| <b>Current Form Total</b> | <b>3.2</b> | <b>0.0</b> | <b>3.2</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 5.8        | 0.0        | 5.8        |
| <b>Final Form Total</b>      | <b>5.8</b> | <b>0.0</b> | <b>5.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 4.36                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 57.84                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.03E+00                                   |
| Np-237  | 2.78E-05                                   |
| Pu-238  | 2.22E+03                                   |
| Pu-239  | 2.00E+00                                   |
| Pu-240  | 1.10E+00                                   |
| Pu-241  | 1.15E+01                                   |
| Pu-242  | 1.30E-03                                   |
| Th-229  | 1.87E-12                                   |
| Th-230  | 3.92E-05                                   |
| Th-232  | 9.30E-16                                   |
| U-233   | 1.87E-09                                   |
| U-234   | 2.45E-01                                   |
| U-235   | 6.70E-08                                   |
| U-236   | 1.11E-06                                   |
| U-238   | 6.67E-12                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

Plutonium Oxide Scrap

Waste Stream ID: **SR-W027-999-MD-HET**

## Appendix A

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Savannah River Site  | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Remediation/D&D Waste  | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | CH Mixed TRU/F listed solvents - Heterogeneous debris from offsite |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |              |            |              |
|---|--------------|------------|--------------|
| Container Type                          | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner             | 172.2        | 0.0        | 172.2        |
| 83-gal Drum                             | 18.9         | 0.0        | 18.9         |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 12.2         | 0.0        | 12.2         |
| Box - Misc                              | 117.8        | 0.0        | 117.8        |
| Box - Steel                             | 343.2        | 0.0        | 343.2        |
| SWB Dir Ld w/ Liner                     | 34.0         | 0.0        | 34.0         |
| <b>Current Form Total</b>               | <b>698.4</b> | <b>0.0</b> | <b>698.4</b> |

| Final Form Volumes                  |               |            |               |
|-------------------------------------|---------------|------------|---------------|
| Container Type                      | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/o Liner        | 59.5          | 0.0        | 59.5          |
| SLB2 (5' x 5' x 8) Dir Ld           | 1245.2        | 0.0        | 1245.2        |
| SWB Dir Ld w/o Liner                | 92.6          | 0.0        | 92.6          |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 277.8         | 0.0        | 277.8         |
| <b>Final Form Total</b>             | <b>1675.1</b> | <b>0.0</b> | <b>1675.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 104.05                               |
| Aluminum-based Metals/Alloys    | 2.54                                 |
| Other Metals                    | 4.46                                 |
| Other Inorganic Materials       | 10.01                                |
| Cellulosics                     | 1.37                                 |
| Rubber                          | 2.03                                 |
| Plastics                        | 4.70                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 2.49                                 |
| Organic Matrix                  | 2.13                                 |
| Soils/gravel                    | 23.29                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 210.02                               |
| Packaging Material, Plastic     | 2.67                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.24E-01                                   |
| Cm-244  | 9.13E-07                                   |
| Np-237  | 2.26E-06                                   |
| Pu-238  | 2.39E+02                                   |
| Pu-239  | 2.34E-01                                   |
| Pu-240  | 1.25E-01                                   |
| Pu-241  | 1.40E+00                                   |
| Pu-242  | 1.42E-04                                   |
| Pu-244  | 2.63E-18                                   |
| Th-229  | 7.50E-08                                   |
| Th-230  | 4.23E-06                                   |
| Th-232  | 1.06E-16                                   |
| U-233   | 2.36E-05                                   |
| U-234   | 2.65E-02                                   |
| U-235   | 1.31E-07                                   |
| U-236   | 1.26E-07                                   |
| U-238   | 2.74E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D030, D032, D034, D037, D043, F002, F003, F004, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste.

Waste Stream ID: **SR-W027-999-MD-HOM-A**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                             |                                       |                       |                   |            |          |    |
|-------------|-----------------------------|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Savannah River Site         | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3113      | Handling | CH |
| Source Cat. | Remediation/D&D Waste       | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | CH Mixed TRU Solids (S3000) | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |            |            |            |
|---|------------|------------|------------|
| Container Type                          | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner             | 1.7        | 0.0        | 1.7        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 1.0        | 0.0        | 1.0        |
| <b>Current Form Total</b>               | <b>2.6</b> | <b>0.0</b> | <b>2.6</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.3        | 0.0        | 2.3        |
| <b>Final Form Total</b>     | <b>2.3</b> | <b>0.0</b> | <b>2.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 6.02                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 8.99                                 |
| Other Inorganic Materials       | 19.83                                |
| Cellulosics                     | 2.40                                 |
| Rubber                          | 0.07                                 |
| Plastics                        | 15.41                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 118.29                               |
| Organic Matrix                  | 3.90                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.49E-02                                   |
| Np-237  | 1.21E-05                                   |
| Pu-238  | 1.32E+01                                   |
| Pu-239  | 9.20E-03                                   |
| Pu-240  | 7.34E-04                                   |
| Pu-241  | 9.62E-03                                   |
| Pu-242  | 2.31E-08                                   |
| Th-229  | 1.92E-12                                   |
| Th-230  | 2.24E-07                                   |
| Th-232  | 4.22E-19                                   |
| U-233   | 1.46E-09                                   |
| U-234   | 1.46E-03                                   |
| U-235   | 1.42E-07                                   |
| U-236   | 6.11E-10                                   |
| U-238   | 4.98E-17                                   |

## Haz. Waste No(s).

D006, D007, D008

No TRUCON Codes Provided

## Waste Stream Description

Aqueous liquids absorbed in polyethylene bottles.

Waste Stream ID: SR-W027-999-MD-HOM-B

## Appendix A

## TRU Waste Inventory Profile Report

|             |                             |                       |                       |                   |                                       |          |    |
|-------------|-----------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Savannah River Site         | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3121                                 | Handling | CH |
| Source Cat. | Remediation/D&D Waste       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | CH Mixed TRU Solids (S3000) |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| Box - Steel               | 4.2        | 0.0        | 4.2        |
| <b>Current Form Total</b> | <b>4.2</b> | <b>0.0</b> | <b>4.2</b> |

| Final Form Volumes        |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| SLB2 (5' x 5' x 8) Dir Ld | 22.6        | 0.0        | 22.6        |
| <b>Final Form Total</b>   | <b>22.6</b> | <b>0.0</b> | <b>22.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 6.02                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 8.99                                 |
| Other Inorganic Materials       | 19.83                                |
| Cellulosics                     | 2.40                                 |
| Rubber                          | 0.07                                 |
| Plastics                        | 15.41                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 118.29                               |
| Organic Matrix                  | 3.90                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 216.30                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.49E-02                                   |
| Np-237  | 1.21E-05                                   |
| Pu-238  | 1.32E+01                                   |
| Pu-239  | 9.20E-03                                   |
| Pu-240  | 7.34E-04                                   |
| Pu-241  | 9.62E-03                                   |
| Pu-242  | 2.31E-08                                   |
| Th-229  | 1.92E-12                                   |
| Th-230  | 2.24E-07                                   |
| Th-232  | 4.22E-19                                   |
| U-233   | 1.46E-09                                   |
| U-234   | 1.46E-03                                   |
| U-235   | 1.42E-07                                   |
| U-236   | 6.11E-10                                   |
| U-238   | 4.98E-17                                   |

## Haz. Waste No(s).

D004, D006, D007,  
D008, D009, D011,  
F002, F003, F006,  
F007, F009

**No TRUCON  
Codes Provided**

## Waste Stream Description

Waste water treatment sludge.



Waste Stream ID: SR-W027-999-MD-HOM-C

## Appendix A

## TRU Waste Inventory Profile Report

|             |                             |                       |                       |                                       |            |          |    |
|-------------|-----------------------------|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Savannah River Site         | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3000      | Handling | CH |
| Source Cat. | Remediation/D&D Waste       | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | CH Mixed TRU Solids (S3000) |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.0        | 0.0        | 1.0        |
| <b>Current Form Total</b>   | <b>1.0</b> | <b>0.0</b> | <b>1.0</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.0        | 0.0        | 1.0        |
| <b>Final Form Total</b>     | <b>1.0</b> | <b>0.0</b> | <b>1.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 6.02                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 8.99                                 |
| Other Inorganic Materials       | 19.83                                |
| Cellulosics                     | 2.40                                 |
| Rubber                          | 0.07                                 |
| Plastics                        | 15.41                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 118.29                               |
| Organic Matrix                  | 3.90                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.49E-02                                   |
| Np-237  | 1.21E-05                                   |
| Pu-238  | 1.32E+01                                   |
| Pu-239  | 9.20E-03                                   |
| Pu-240  | 7.34E-04                                   |
| Pu-241  | 9.62E-03                                   |
| Pu-242  | 2.31E-08                                   |
| Th-229  | 1.92E-12                                   |
| Th-230  | 2.24E-07                                   |
| Th-232  | 4.22E-19                                   |
| U-233   | 1.46E-09                                   |
| U-234   | 1.46E-03                                   |
| U-235   | 1.42E-07                                   |
| U-236   | 6.11E-10                                   |
| U-238   | 4.98E-17                                   |

## Haz. Waste No(s).

D004, D006, D007, D008, D009, D011, F002, F003

No TRUCON Codes Provided

## Waste Stream Description

Not yet incorporated into an AK Report

Waste Stream ID: **SR-W027-999-MD-SOIL**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                    |                       |                 |                                       |            |          |    |
|-------------|------------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Savannah River Site                | Final Waste Form      | Soils           | Waste Matrix Code                     | S4200      | Handling | CH |
| Source Cat. | Remediation/D&D Waste              | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | CH Mixed TRU Soil / Gravel (S4000) |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 2.9         | 0.0        | 2.9         |
| Box - Steel                 | 18.4        | 0.0        | 18.4        |
| SWB Dir Ld w/ Liner         | 5.7         | 0.0        | 5.7         |
| <b>Current Form Total</b>   | <b>27.0</b> | <b>0.0</b> | <b>27.0</b> |

| Final Form Volumes                  |             |            |             |
|-------------------------------------|-------------|------------|-------------|
| Container Type                      | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner        | 0.8         | 0.0        | 0.8         |
| SLB2 (5' x 5' x 8) Dir Ld           | 79.2        | 0.0        | 79.2        |
| SWB Dir Ld w/o Liner                | 5.7         | 0.0        | 5.7         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 4.8         | 0.0        | 4.8         |
| <b>Final Form Total</b>             | <b>90.5</b> | <b>0.0</b> | <b>90.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 2.06                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 40.52                                |
| Soils/gravel                    | 1833.47                              |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 211.66                               |
| Packaging Material, Plastic     | 0.85                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.53E-04                                   |
| Np-237  | 1.37E-06                                   |
| Pu-238  | 1.75E-01                                   |
| Pu-239  | 5.94E-03                                   |
| Pu-242  | 1.09E-10                                   |
| Th-229  | 2.18E-13                                   |
| Th-230  | 2.04E-09                                   |
| U-233   | 1.66E-10                                   |
| U-234   | 1.56E-05                                   |
| U-235   | 1.64E-10                                   |
| U-238   | 2.35E-19                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F002, F003, F004, F005, F007, F009

## TRUCON Code(s)

111/211

## Waste Stream Description

Soil mixed with absorbant and some commingled debris.

Waste Stream ID: **SR-W027-FB-PRE86-C-S**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                     |                       |                 |                   |                                       |          |    |
|-------------|---------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Savannah River Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5300                                 | Handling | CH |
| Source Cat. | N/A                 | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                 |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Shipped Volumes                     |                    |               |
|-------------------------------------|--------------------|---------------|
| Container Type                      | Ref. Waste Stream  | Volume        |
| 55-gal Drum Dir Ld w/ Liner         | WP-SR-W027-FB-PRE8 | 175.8         |
| SWB w/ 4 - 55-gal Drums w/ Liners   | WP-SR-W027-FB-PRE8 | 264.6         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | WP-SR-W027-FB-PRE8 | 1944.7        |
| <b>Shipped Total</b>                |                    | <b>2385.1</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 9.99                                 |
| Aluminum-based Metals/Alloys | 0.10                                 |
| Other Metals                 | 0.05                                 |
| Other Inorganic Materials    | 2.84                                 |
| Cellulosics                  | 4.18                                 |
| Rubber                       | 3.45                                 |
| Plastics                     | 30.25                                |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.12E-01                                   |
| Am-243  | 4.74E-08                                   |
| Cm-244  | 4.19E-05                                   |
| Cs-137  | 7.22E-08                                   |
| Np-237  | 3.21E-06                                   |
| Pu-238  | 6.71E-02                                   |
| Pu-239  | 1.39E+00                                   |
| Pu-240  | 1.87E-01                                   |
| Pu-241  | 2.93E+00                                   |
| Pu-242  | 9.24E-05                                   |
| Sr-90   | 5.85E-08                                   |
| Th-229  | 4.19E-10                                   |
| Th-230  | 1.28E-09                                   |
| Th-232  | 2.61E-08                                   |
| U-233   | 1.49E-06                                   |
| U-234   | 4.76E-05                                   |
| U-235   | 4.85E-08                                   |
| U-236   | 1.67E-08                                   |
| U-238   | 1.16E-07                                   |

## Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D018, D019, D022, D029, D039, D040, D043, F001, F002, F003, F005, U002, U151

## TRUCON Code(s)

125/225, 154

## Waste Stream Description

N/A

Waste Stream ID: **SR-W027-HBL-Box-A**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                        |                                       |                 |                   |            |          |    |
|-------------|------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site    | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | CH |
| Source Cat. | Remediation/D&D Waste  | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | CH mixed TRU from 221H | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |              |            |              |
|---------------------------|--------------|------------|--------------|
| Container Type            | Stored       | Proj.      | Total        |
| Box - SRS Black Box       | 427.0        | 0.0        | 427.0        |
| <b>Current Form Total</b> | <b>427.0</b> | <b>0.0</b> | <b>427.0</b> |

| Final Form Volumes        |              |            |              |
|---------------------------|--------------|------------|--------------|
| Container Type            | Stored       | Proj.      | Total        |
| SLB2 (5' x 5' x 8) Dir Ld | 339.6        | 0.0        | 339.6        |
| <b>Final Form Total</b>   | <b>339.6</b> | <b>0.0</b> | <b>339.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 69.20                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 46.10                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 216.30                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.30E-03                                   |
| Np-237  | 2.99E-04                                   |
| Pu-238  | 1.05E+01                                   |
| Pu-239  | 8.35E-03                                   |
| Pu-240  | 4.54E-03                                   |
| Pu-241  | 1.14E-01                                   |
| Pu-242  | 5.37E-06                                   |
| Th-229  | 1.55E-11                                   |
| Th-230  | 3.73E-08                                   |
| Th-232  | 8.52E-19                                   |
| U-233   | 2.07E-08                                   |
| U-234   | 5.08E-04                                   |
| U-235   | 1.32E-10                                   |
| U-236   | 2.15E-09                                   |
| U-238   | 1.30E-14                                   |

## Haz. Waste No(s).

D008, F001, F002,  
F003, F005No TRUCON  
Codes Provided

## Waste Stream Description

This waste stream has been separated from its parent waste stream SR-W027-HBL-Box.

Waste Stream ID: **SR-W027-SRSG-HET**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                 |                                       |                 |                   |            |          |    |
|-------------|---------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site             | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | CH |
| Source Cat. | Source Information Not Compiled | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | CH Mixed TRU Debris (S5000)     | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |              |              |
|-----------------------------|--------------|--------------|--------------|
| Container Type              | Stored       | Proj.        | Total        |
| 55-gal Drum Dir Ld w/ Liner | 52.4         | 161.8        | 214.2        |
| Box - SRS B-25 OP           | 7.2          | 0.0          | 7.2          |
| Box - SRS Poly Box          | 0.2          | 0.0          | 0.2          |
| Box - Steel                 | 165.0        | 0.0          | 165.0        |
| SLB2 (5' x 5' x 8) Dir Ld   | 5.7          | 0.0          | 5.7          |
| SWB Dir Ld w/ Liner         | 17.0         | 0.0          | 17.0         |
| <b>Current Form Total</b>   | <b>247.5</b> | <b>161.8</b> | <b>409.3</b> |

| Final Form Volumes                   |              |              |              |
|--------------------------------------|--------------|--------------|--------------|
| Container Type                       | Stored       | Proj.        | Total        |
| 55-gal Drum Dir Ld w/ Liner          | 15.8         | 161.8        | 177.6        |
| SLB2 (5' x 5' x 8) Dir Ld            | 515.1        | 0.0          | 515.1        |
| SWB Dir Ld w/o Liner                 | 18.9         | 0.0          | 18.9         |
| TDOP w/ 10' - 55-gal Drums w/ Liners | 86.2         | 0.0          | 86.2         |
| <b>Final Form Total</b>              | <b>636.0</b> | <b>161.8</b> | <b>797.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 3.85                                 |
| Aluminum-based Metals/Alloys    | 0.42                                 |
| Other Metals                    | 142.20                               |
| Other Inorganic Materials       | 0.09                                 |
| Cellulosics                     | 4.20                                 |
| Rubber                          | 0.68                                 |
| Plastics                        | 10.69                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 16.46                                |
| Organic Matrix                  | 4.79                                 |
| Soils/gravel                    | 0.02                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 195.93                               |
| Packaging Material, Plastic     | 9.98                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.40E-01                                   |
| Am-243  | 1.56E-05                                   |
| Cm-244  | 6.40E-04                                   |
| Np-237  | 5.76E-04                                   |
| Pu-238  | 1.51E+00                                   |
| Pu-239  | 9.20E-01                                   |
| Pu-240  | 2.06E-01                                   |
| Pu-241  | 2.43E+00                                   |
| Pu-242  | 2.48E-03                                   |
| Th-229  | 6.55E-06                                   |
| Th-230  | 1.47E-06                                   |
| Th-232  | 2.38E-14                                   |
| U-233   | 2.41E-03                                   |
| U-234   | 5.70E-03                                   |
| U-235   | 4.47E-06                                   |
| U-236   | 1.67E-05                                   |
| U-238   | 2.63E-04                                   |

## Haz. Waste No(s).

D008, F001, F002, F003, F004, F005, U133

## TRUCON Code(s)

125/225

## Waste Stream Description

Mixed CH TRU Debris from waste remediation activities and burial ground operations

Waste Stream ID: SR-W027-SRSG-HET-RH

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                 |                       |                 |                                       |            |          |    |
|-------------|---------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Savannah River Site             | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | RH |
| Source Cat. | Source Information Not Compiled | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | RH Mixed TRU Debris (S5000)     |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |             |             |
|-----------------------------|------------|-------------|-------------|
| Container Type              | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner | 2.1        | 10.6        | 12.7        |
| <b>Current Form Total</b>   | <b>2.1</b> | <b>10.6</b> | <b>12.7</b> |

| Final Form Volumes                         |            |             |             |
|--|------------|-------------|-------------|
| Container Type                             | Stored     | Proj.       | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 3.6        | 15.1        | 18.7        |
| <b>Final Form Total</b>                    | <b>3.6</b> | <b>15.1</b> | <b>18.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 288.00                               |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 78.00                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 8.60                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.98E-02                                   |
| Am-243  | 4.44E-02                                   |
| Cm-244  | 1.46E+00                                   |
| Np-237  | 3.23E-04                                   |
| Pu-238  | 1.46E-01                                   |
| Pu-239  | 2.11E-01                                   |
| Pu-240  | 7.28E-02                                   |
| Pu-241  | 5.62E-01                                   |
| Pu-242  | 2.26E-05                                   |
| Pu-244  | 6.99E-15                                   |
| Th-229  | 5.52E-11                                   |
| Th-230  | 1.83E-09                                   |
| Th-232  | 4.20E-17                                   |
| U-233   | 4.07E-08                                   |
| U-234   | 1.35E-05                                   |
| U-235   | 6.02E-09                                   |
| U-236   | 5.98E-08                                   |
| U-238   | 9.90E-14                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

RH Mixed TRU debris.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **SR-W027-SRSG-HOM**

## Appendix A

## TRU Waste Inventory Profile Report

|             |                                 |                                       |                       |                   |            |          |    |
|-------------|---------------------------------|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Savannah River Site             | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3000      | Handling | CH |
| Source Cat. | Source Information Not Compiled | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | CH Mixed TRU Solids (S3000)     | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 10.4        | 0.0        | 10.4        |
| <b>Current Form Total</b>   | <b>10.4</b> | <b>0.0</b> | <b>10.4</b> |

| Final Form Volumes                  |             |            |             |
|-------------------------------------|-------------|------------|-------------|
| Container Type                      | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner         | 3.1         | 0.0        | 3.1         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 19.2        | 0.0        | 19.2        |
| <b>Final Form Total</b>             | <b>22.3</b> | <b>0.0</b> | <b>22.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 29.30                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 1.29                                 |
| Cellulosics                     | 11.22                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 22.34                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 250.94                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 205.53                               |
| Packaging Material, Plastic     | 19.03                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.64E-01                                   |
| Am-243  | 5.57E-05                                   |
| Cm-244  | 1.83E-03                                   |
| Np-237  | 1.03E-03                                   |
| Pu-238  | 6.72E+01                                   |
| Pu-239  | 4.61E+00                                   |
| Pu-240  | 6.23E-01                                   |
| Pu-241  | 3.01E+00                                   |
| Pu-242  | 4.73E-04                                   |
| Th-229  | 1.75E-10                                   |
| Th-230  | 9.78E-07                                   |
| Th-232  | 1.23E-14                                   |
| U-233   | 1.29E-07                                   |
| U-234   | 6.74E-03                                   |
| U-235   | 1.22E-06                                   |
| U-236   | 8.87E-06                                   |
| U-238   | 2.40E-05                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

Inorganic particulate from CIF stabilized with concrete and sludge material from D&amp;D work in "F" area.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

**ANNUAL TRANSURANIC WASTE INVENTORY REPORT – 2007**  
**APPENDIX B**  
**Emplaced Waste**



The following waste stream profiles contain information on waste streams emplaced in the WIPP as of the inventory date, December 31, 2006. The TRU waste sites that have shipped TRU waste to the WIPP are:

|   |    |
|---|----|
| Argonne National Laboratory – East        | AE |
| Idaho National Laboratory                 | IN |
| Los Alamos National Laboratory            | LA |
| Lawrence Livermore National Laboratory    | LL |
| Nevada Test Site                          | NT |
| Rocky Flats Environmental Technology Site | RF |
| Hanford (Richland)                        | RL |
| Savannah River Site                       | SR |

Waste Stream ID: **WP-AECHDM**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                                    |                       |                 |                   |                                       |          |    |
|-------------|------------------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Argonne National Laboratory - East | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | N/A                                | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner         | AECHDM-S          | 56.6         |
| 55-gal Drum Dir Ld w/o Liner        | AECHDM-S          | 0.2          |
| TDOP w/ 10 - 55-gal Drums w/ Liners | AECHDM-S          | 47.9         |
| <b>Emplaced Total</b>               |                   | <b>104.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 76.72                                |
| Aluminum-based Metals/Alloys    | 1.41                                 |
| Other Metals                    | 6.14                                 |
| Other Inorganic Materials       | 6.37                                 |
| Cellulosics                     | 5.55                                 |
| Rubber                          | 10.96                                |
| Plastics                        | 40.03                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.88                                 |
| Organic Matrix                  | 0.88                                 |
| Soils/gravel                    | 0.11                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 170.56                               |
| Packaging Material, Plastic     | 27.36                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.19E-01                                   |
| Am-243  | 1.80E-02                                   |
| Cm-244  | 1.16E-03                                   |
| Cs-137  | 1.74E-02                                   |
| Np-237  | 1.17E-03                                   |
| Pu-238  | 6.15E-01                                   |
| Pu-239  | 8.16E-01                                   |
| Pu-240  | 6.18E-01                                   |
| Pu-241  | 9.02E-01                                   |
| Pu-242  | 2.50E-04                                   |
| Pu-244  | 1.92E-19                                   |
| Sr-90   | 1.81E-02                                   |
| Th-229  | 8.16E-05                                   |
| Th-230  | 2.03E-08                                   |
| Th-232  | 4.07E-18                                   |
| U-233   | 4.01E-04                                   |
| U-234   | 7.54E-04                                   |
| U-235   | 1.43E-05                                   |
| U-236   | 5.49E-08                                   |
| U-238   | 4.21E-04                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D021, D027, D028, D030, D037, F001, F002, F003, F004, F005

## TRUCON Code(s)

116/216

## Waste Stream Description

N/A

Waste Stream ID: **WP-AECHHM**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                                    |                       |                       |                   |                                       |          |    |
|-------------|------------------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Argonne National Laboratory - East | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3110                                 | Handling | CH |
| Source Cat. | N/A                                | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                   |             |
|-------------------------------------|-------------------|-------------|
| Container Type                      | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner         | AECHHM-S          | 9.4         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | AECHHM-S          | 4.8         |
| <b>Emplaced Total</b>               |                   | <b>14.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 348.27                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 160.22                               |
| Packaging Material, Plastic     | 29.93                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.04E+00                                   |
| Am-243  | 3.63E-04                                   |
| Cs-137  | 1.01E-04                                   |
| Np-237  | 1.21E-04                                   |
| Pu-238  | 3.17E-01                                   |
| Pu-239  | 2.92E+00                                   |
| Pu-240  | 1.16E+00                                   |
| Pu-241  | 3.11E-13                                   |
| Pu-242  | 1.43E-04                                   |
| Sr-90   | 1.05E-04                                   |
| Th-229  | 2.27E-05                                   |
| Th-230  | 1.02E-08                                   |
| Th-232  | 7.67E-18                                   |
| U-233   | 1.57E-09                                   |
| U-234   | 3.79E-04                                   |
| U-235   | 7.46E-06                                   |
| U-236   | 1.04E-07                                   |
| U-238   | 1.90E-04                                   |

## Haz. Waste No(s).

D004, D005, D006,  
D007, D008, D009,  
D010, D011, D018,  
D019, D021, D027,  
D028, D030, D035,  
D036, D037, F001,  
F002, F003, F004,  
F005

## TRUCON Code(s)

111/211

## Waste Stream Description

N/A

Waste Stream ID: **WP-MU-W002**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                                    |                                       |                 |                   |            |          |    |
|-------------|------------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Argonne National Laboratory - East | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | N/A                                | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                   |            |
|-------------------------------------|-------------------|------------|
| Container Type                      | Ref. Waste Stream | Volume     |
| TDOP w/ 10 - 55-gal Drums w/ Liners | MU-W002-S         | 4.8        |
| <b>Emplaced Total</b>               |                   | <b>4.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 6.68                                 |
| Aluminum-based Metals/Alloys    | 2.17                                 |
| Other Metals                    | 0.02                                 |
| Other Inorganic Materials       | 2.73                                 |
| Cellulosics                     | 0.10                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 2.67                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 217.70                               |
| Packaging Material, Plastic     | 16.10                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.46E+00                                   |
| Am-243  | 2.38E-04                                   |
| Cs-137  | 3.57E-07                                   |
| Np-237  | 8.05E-04                                   |
| Pu-239  | 4.73E-03                                   |
| Sr-90   | 3.72E-07                                   |
| Th-229  | 2.29E-04                                   |
| Th-230  | 4.02E-16                                   |
| U-233   | 1.05E-08                                   |
| U-234   | 2.98E-11                                   |
| U-235   | 1.40E-11                                   |
| U-238   | 3.62E-06                                   |

## Haz. Waste No(s).

D006, D011

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **WP-BN004**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                                       |                       |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3150      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| SWB w/ 4 - 55-gal Drums w/ Liners   | BN004-S           | 211.7        |
| TDOP w/ 10 - 55-gal Drums w/ Liners | BN004-S           | 71.9         |
| <b>Emplaced Total</b>               |                   | <b>283.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.03                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.01                                 |
| Other Inorganic Materials       | 1.95                                 |
| Cellulosics                     | 0.01                                 |
| Rubber                          | 0.01                                 |
| Plastics                        | 2.07                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 475.71                               |
| Organic Matrix                  | 1.69                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 212.77                               |
| Packaging Material, Plastic     | 16.25                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.74E-01                                   |
| Cm-244  | 5.91E-03                                   |
| Cs-137  | 8.68E-06                                   |
| Np-237  | 5.93E-04                                   |
| Pu-238  | 1.54E-01                                   |
| Pu-239  | 3.76E+00                                   |
| Pu-240  | 8.49E-01                                   |
| Pu-241  | 7.23E+00                                   |
| Pu-242  | 7.23E-05                                   |
| Sr-90   | 1.47E-05                                   |
| Th-229  | 1.61E-07                                   |
| Th-230  | 6.43E-10                                   |
| Th-232  | 2.49E-18                                   |
| U-233   | 8.57E-04                                   |
| U-234   | 3.62E-05                                   |
| U-235   | 8.20E-06                                   |
| U-236   | 5.04E-08                                   |
| U-238   | 5.35E-06                                   |

## Haz. Waste No(s).

D006, D007, D008, D011, D029, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

111/211

## Waste Stream Description

N/A

Waste Stream ID: **WP-BN161**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                                       |                     |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Inorganic Non-Metal | Waste Matrix Code | S5123      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                   |             |
|-------------------------------------|-------------------|-------------|
| Container Type                      | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner         | BN161-S           | 0.6         |
| SWB w/ 4 - 55-gal Drums w/ Liners   | BN161-S           | 3.8         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | BN161-S           | 57.5        |
| <b>Emplaced Total</b>               |                   | <b>61.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.39                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.07                                 |
| Other Inorganic Materials       | 127.78                               |
| Cellulosics                     | 10.20                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 2.06                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 216.42                               |
| Packaging Material, Plastic     | 16.32                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.78E-01                                   |
| Np-237  | 9.55E-06                                   |
| Pu-238  | 1.59E-01                                   |
| Pu-239  | 3.78E+00                                   |
| Pu-240  | 8.63E-01                                   |
| Pu-241  | 6.24E+00                                   |
| Pu-242  | 6.96E-05                                   |
| Th-229  | 1.92E-15                                   |
| Th-230  | 4.95E-12                                   |
| Th-232  | 6.32E-19                                   |
| U-233   | 4.11E-11                                   |
| U-234   | 7.77E-07                                   |
| U-235   | 4.79E-08                                   |
| U-236   | 2.56E-08                                   |
| U-238   | 1.05E-14                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D029, F001, F002, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-BN211**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                       |                 |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Filter          | Waste Matrix Code | S5410                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner         | BN211-S           | 7.3          |
| SWB w/ 4 - 55-gal Drums w/ Liners   | BN211-S           | 54.8         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | BN211-S           | 483.8        |
| <b>Emplaced Total</b>               |                   | <b>545.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.28                                 |
| Aluminum-based Metals/Alloys    | 1.67                                 |
| Other Metals                    | 0.39                                 |
| Other Inorganic Materials       | 73.61                                |
| Cellulosics                     | 24.37                                |
| Rubber                          | 0.02                                 |
| Plastics                        | 3.81                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.27                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 215.88                               |
| Packaging Material, Plastic     | 16.40                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.71E-01                                   |
| Am-243  | 5.09E-10                                   |
| Cs-137  | 2.55E-09                                   |
| Np-237  | 4.63E-05                                   |
| Pu-238  | 1.62E-01                                   |
| Pu-239  | 3.77E+00                                   |
| Pu-240  | 8.72E-01                                   |
| Pu-241  | 6.07E+00                                   |
| Pu-242  | 7.28E-05                                   |
| Sr-90   | 4.33E-09                                   |
| Th-229  | 5.23E-09                                   |
| Th-230  | 4.92E-11                                   |
| Th-232  | 6.39E-19                                   |
| U-233   | 5.57E-05                                   |
| U-234   | 5.70E-06                                   |
| U-235   | 1.15E-06                                   |
| U-236   | 2.59E-08                                   |
| U-238   | 8.43E-09                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D029, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

119/219

## Waste Stream Description

N/A

Waste Stream ID: **WP-BN243**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                       |                     |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5122                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner         | BN243-S           | 1.5          |
| SWB w/ 4 - 55-gal Drums w/ Liners   | BN243-S           | 7.6          |
| TDOP w/ 10 - 55-gal Drums w/ Liners | BN243-S           | 143.7        |
| <b>Emplaced Total</b>               |                   | <b>152.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.99                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 4.00                                 |
| Other Inorganic Materials       | 87.65                                |
| Cellulosics                     | 0.08                                 |
| Rubber                          | 0.14                                 |
| Plastics                        | 13.57                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 216.54                               |
| Packaging Material, Plastic     | 16.31                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.49E-01                                   |
| Cm-244  | 8.56E-03                                   |
| Cs-137  | 9.28E-10                                   |
| Np-237  | 1.64E-05                                   |
| Pu-238  | 3.49E-02                                   |
| Pu-239  | 7.20E-01                                   |
| Pu-240  | 1.61E-01                                   |
| Pu-241  | 1.23E+00                                   |
| Pu-242  | 1.62E-05                                   |
| Sr-90   | 1.57E-09                                   |
| Th-229  | 3.34E-15                                   |
| Th-230  | 5.38E-11                                   |
| Th-232  | 1.18E-19                                   |
| U-233   | 7.13E-11                                   |
| U-234   | 6.03E-06                                   |
| U-235   | 1.58E-06                                   |
| U-236   | 4.78E-09                                   |
| U-238   | 2.45E-15                                   |

## Haz. Waste No(s).

D005, D008, D009,  
D022, D028, D029,  
F001, F002, F005

## TRUCON Code(s)

118/218, 125/225

## Waste Stream Description

N/A



Waste Stream ID: **WP-BN252**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                                       |                 |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5311      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner         | BN252-S           | 11.9         |
| SWB w/ 4 - 55-gal Drums w/ Liners   | BN252-S           | 51.0         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | BN252-S           | 105.4        |
| <b>Emplaced Total</b>               |                   | <b>168.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.02                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 32.82                                |
| Other Inorganic Materials       | 2.17                                 |
| Cellulosics                     | 0.12                                 |
| Rubber                          | 219.88                               |
| Plastics                        | 1.35                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 209.58                               |
| Packaging Material, Plastic     | 17.63                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.02E-01                                   |
| Cs-137  | 2.65E-09                                   |
| Np-237  | 3.63E-04                                   |
| Pu-238  | 2.13E-01                                   |
| Pu-239  | 5.90E+00                                   |
| Pu-240  | 1.27E+00                                   |
| Pu-241  | 1.23E+01                                   |
| Pu-242  | 1.35E-04                                   |
| Sr-90   | 4.22E-09                                   |
| Th-229  | 7.42E-14                                   |
| Th-230  | 2.24E-11                                   |
| Th-232  | 9.28E-19                                   |
| U-233   | 1.58E-09                                   |
| U-234   | 2.79E-06                                   |
| U-235   | 1.13E-06                                   |
| U-236   | 3.76E-08                                   |
| U-238   | 2.04E-14                                   |

## Haz. Waste No(s).

D008, D022, D028,  
D029, F001, F002,  
F005, F006, F007,  
F009

## TRUCON Code(s)

121/221, 123/223

## Waste Stream Description

N/A

Waste Stream ID: **WP-BN296**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                       |                          |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|--------------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Lead/Cadmium Metal Waste | Waste Matrix Code | S5112                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related          | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                          |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner         | BN296-S           | 26.8         |
| SWB w/ 4 - 55-gal Drums w/ Liners   | BN296-S           | 24.6         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | BN296-S           | 440.7        |
| <b>Emplaced Total</b>               |                   | <b>492.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 72.69                                |
| Aluminum-based Metals/Alloys    | 0.36                                 |
| Other Metals                    | 97.03                                |
| Other Inorganic Materials       | 2.87                                 |
| Cellulosics                     | 2.69                                 |
| Rubber                          | 0.57                                 |
| Plastics                        | 1.46                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 212.63                               |
| Packaging Material, Plastic     | 17.25                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.36E+00                                   |
| Cm-244  | 2.52E-03                                   |
| Cs-137  | 1.88E-08                                   |
| Np-237  | 7.93E-05                                   |
| Pu-238  | 1.68E-01                                   |
| Pu-239  | 3.49E+00                                   |
| Pu-240  | 7.76E-01                                   |
| Pu-241  | 5.52E+00                                   |
| Pu-242  | 7.90E-05                                   |
| Sr-90   | 3.38E-08                                   |
| Th-229  | 1.08E-09                                   |
| Th-230  | 1.95E-11                                   |
| Th-232  | 5.68E-19                                   |
| U-233   | 1.15E-05                                   |
| U-234   | 2.41E-06                                   |
| U-235   | 2.03E-03                                   |
| U-236   | 2.30E-08                                   |
| U-238   | 1.32E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D029, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

117/217, 125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-BN304**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                       |                 |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5490                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner         | BN304-S           | 4.4          |
| SWB w/ 4 - 55-gal Drums w/ Liners   | BN304-S           | 20.8         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | BN304-S           | 297.0        |
| <b>Emplaced Total</b>               |                   | <b>322.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 15.85                                |
| Aluminum-based Metals/Alloys    | 0.03                                 |
| Other Metals                    | 23.46                                |
| Other Inorganic Materials       | 4.49                                 |
| Cellulosics                     | 4.79                                 |
| Rubber                          | 7.80                                 |
| Plastics                        | 6.19                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.01                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.09                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 216.10                               |
| Packaging Material, Plastic     | 16.40                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.66E-01                                   |
| Cs-137  | 1.31E-06                                   |
| Np-237  | 7.43E-06                                   |
| Pu-238  | 4.81E+01                                   |
| Pu-239  | 9.45E-02                                   |
| Pu-240  | 7.12E-02                                   |
| Pu-241  | 8.12E-01                                   |
| Pu-242  | 6.02E-05                                   |
| Sr-90   | 2.67E-06                                   |
| Th-229  | 1.51E-15                                   |
| Th-230  | 6.75E-10                                   |
| Th-232  | 5.22E-20                                   |
| U-233   | 3.23E-11                                   |
| U-234   | 1.43E-04                                   |
| U-235   | 1.34E-07                                   |
| U-236   | 2.11E-09                                   |
| U-238   | 7.40E-05                                   |

## Haz. Waste No(s).

D004, D005, D006,  
D007, D008, D009,  
D010, D011, D022,  
D029, F001, F002,  
F005, F007, F009

## TRUCON Code(s)

119/219, 122/222,  
123/223, 125/225,  
130/230

## Waste Stream Description

N/A

Waste Stream ID: **WP-BN510**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                                       |                 |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes              |                   |               |
|-------------------------------|-------------------|---------------|
| Container Type                | Ref. Waste Stream | Volume        |
| 100-gal Drum Dir Ld w/o Liner | BN510-S           | 2311.9        |
| <b>Emplaced Total</b>         |                   | <b>2311.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 310.37                               |
| Aluminum-based Metals/Alloys    | 2.69                                 |
| Other Metals                    | 3.65                                 |
| Other Inorganic Materials       | 13.34                                |
| Cellulosics                     | 155.69                               |
| Rubber                          | 4.21                                 |
| Plastics                        | 179.84                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.03                                 |
| Organic Matrix                  | 0.01                                 |
| Soils/gravel                    | 0.02                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 113.70                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.87E-01                                   |
| Cs-137  | 1.46E-07                                   |
| Np-237  | 1.94E-05                                   |
| Pu-238  | 8.37E-02                                   |
| Pu-239  | 1.20E+00                                   |
| Pu-240  | 2.58E-01                                   |
| Pu-241  | 2.23E+00                                   |
| Pu-242  | 2.19E-05                                   |
| Sr-90   | 2.41E-07                                   |
| U-233   | 5.24E-06                                   |
| U-234   | 4.41E-04                                   |
| U-235   | 4.35E-04                                   |
| U-238   | 9.67E-06                                   |

## Haz. Waste No(s).

D004, D005, D006,  
D007, D008, D009,  
D010, D011, D022,  
D028, D029, F001,  
F002, F005, F006,  
F007, F009

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **WP-BN835**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                       |                       |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3113                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| SWB w/ 4 - 55-gal Drums w/ Liners   | BN835-S           | 5.7          |
| TDOP w/ 10 - 55-gal Drums w/ Liners | BN835-S           | 953.2        |
| <b>Emplaced Total</b>               |                   | <b>958.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.02                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.75                                 |
| Cellulosics                     | 0.92                                 |
| Rubber                          | 0.01                                 |
| Plastics                        | 0.56                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 216.48                               |
| Organic Matrix                  | 0.09                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 217.66                               |
| Packaging Material, Plastic     | 16.10                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.44E-02                                   |
| Cs-137  | 8.43E-08                                   |
| Np-237  | 5.03E-06                                   |
| Pu-238  | 1.49E+00                                   |
| Pu-239  | 3.03E-03                                   |
| Pu-240  | 1.92E-03                                   |
| Pu-241  | 3.52E-02                                   |
| Pu-242  | 1.89E-06                                   |
| Sr-90   | 1.47E-07                                   |
| Th-229  | 1.03E-15                                   |
| Th-230  | 1.93E-11                                   |
| Th-232  | 1.41E-21                                   |
| U-233   | 2.19E-11                                   |
| U-234   | 4.26E-06                                   |
| U-235   | 1.42E-10                                   |
| U-236   | 5.70E-11                                   |
| U-238   | 2.23E-07                                   |

## Haz. Waste No(s).

D007, D008, D009,  
F001, F002

## TRUCON Code(s)

111/211

## Waste Stream Description

N/A

Waste Stream ID: **WP-BN836**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                       |                       |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3121                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                  |                   |               |
|-----------------------------------|-------------------|---------------|
| Container Type                    | Ref. Waste Stream | Volume        |
| SWB w/ 4 - 55-gal Drums w/ Liners | BN836-S           | 1088.6        |
| <b>Emplaced Total</b>             |                   | <b>1088.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.01                                 |
| Other Inorganic Materials       | 0.08                                 |
| Cellulosics                     | 0.07                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.27                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 531.63                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 211.10                               |
| Packaging Material, Plastic     | 16.30                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.40E-03                                   |
| Cs-137  | 2.60E-07                                   |
| Np-237  | 1.70E-06                                   |
| Pu-238  | 1.45E+00                                   |
| Pu-239  | 2.18E-03                                   |
| Pu-240  | 1.49E-03                                   |
| Pu-241  | 5.04E-03                                   |
| Pu-242  | 1.71E-06                                   |
| Sr-90   | 4.29E-07                                   |
| U-234   | 1.95E-07                                   |
| U-235   | 2.59E-08                                   |
| U-238   | 1.23E-08                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F005

## TRUCON Code(s)

111/211

## Waste Stream Description

N/A

Waste Stream ID: **WP-BNINW216**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                       |                       |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3121                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                   |               |
|-------------------------------------|-------------------|---------------|
| Container Type                      | Ref. Waste Stream | Volume        |
| 55-gal Drum Dir Ld w/ Liner         | BNINW216-S        | 58.7          |
| SWB w/ 4 - 55-gal Drums w/ Liners   | BNINW216-S        | 506.5         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | BNINW216-S        | 3056.0        |
| <b>Emplaced Total</b>               |                   | <b>3621.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.02                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.06                                 |
| Other Inorganic Materials       | 5.50                                 |
| Cellulosics                     | 0.01                                 |
| Rubber                          | 0.01                                 |
| Plastics                        | 0.55                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 361.64                               |
| Organic Matrix                  | 0.34                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 215.37                               |
| Packaging Material, Plastic     | 16.47                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.66E+00                                   |
| Cs-137  | 1.28E-08                                   |
| Np-237  | 7.47E-05                                   |
| Pu-238  | 3.30E-02                                   |
| Pu-239  | 3.36E-01                                   |
| Pu-240  | 8.38E-02                                   |
| Pu-241  | 1.03E+00                                   |
| Pu-242  | 4.47E-05                                   |
| Sr-90   | 2.06E-08                                   |
| Th-229  | 1.50E-14                                   |
| Th-230  | 3.46E-10                                   |
| Th-232  | 6.14E-20                                   |
| U-233   | 3.21E-10                                   |
| U-234   | 3.85E-05                                   |
| U-235   | 6.75E-06                                   |
| U-236   | 2.48E-09                                   |
| U-238   | 4.59E-04                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, F001, F002, F003, F005, F006, F007, F009

## TRUCON Code(s)

111/211, 132/232

## Waste Stream Description

N/A

Waste Stream ID: **WP-BNINW218**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                       |                       |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3121                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| SWB w/ 4 - 55-gal Drums w/ Liners   | BNINW218-S        | 39.7         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | BNINW218-S        | 435.9        |
| <b>Emplaced Total</b>               |                   | <b>475.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.03                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 31.78                                |
| Cellulosics                     | 0.01                                 |
| Rubber                          | 0.01                                 |
| Plastics                        | 2.72                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 328.39                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 217.15                               |
| Packaging Material, Plastic     | 16.12                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.93E-02                                   |
| Cs-137  | 2.19E-08                                   |
| Np-237  | 5.49E-04                                   |
| Pu-238  | 4.83E-03                                   |
| Pu-239  | 9.44E-02                                   |
| Pu-240  | 1.94E-02                                   |
| Pu-241  | 1.96E-01                                   |
| Pu-242  | 2.84E-06                                   |
| Sr-90   | 3.58E-08                                   |
| Th-229  | 4.49E-13                                   |
| Th-230  | 6.33E-10                                   |
| Th-232  | 5.69E-20                                   |
| U-233   | 4.79E-09                                   |
| U-234   | 3.52E-05                                   |
| U-235   | 3.76E-06                                   |
| U-236   | 1.15E-09                                   |
| U-238   | 2.98E-04                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D010, D011,  
D032, F001, F002,  
F005, F006, F007,  
F009

## TRUCON Code(s)

111/211

## Waste Stream Description

N/A



Waste Stream ID: **WP-ID-RF-BNL-ASH**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                                       |                       |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3111      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |            |
|------------------------------|-------------------|------------|
| Container Type               | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/o Liner | ID-RF-BNL-ASH-S   | 0.2        |
| <b>Emplaced Total</b>        |                   | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 9.62                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 37.02                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 7.69                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.88E-01                                   |
| Np-237  | 8.83E-06                                   |
| Pu-238  | 1.19E-01                                   |
| Pu-239  | 3.52E+00                                   |
| Pu-240  | 8.09E-01                                   |
| Pu-241  | 5.26E+00                                   |
| Pu-242  | 6.47E-05                                   |
| Th-229  | 1.77E-15                                   |
| Th-230  | 1.52E-12                                   |
| Th-232  | 5.92E-19                                   |
| U-233   | 3.80E-11                                   |
| U-234   | 3.38E-07                                   |
| U-235   | 3.47E-09                                   |
| U-236   | 2.40E-08                                   |
| U-238   | 9.76E-15                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F005

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **WP-ID-RF-S3114**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                       |                     |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Solidified Organics | Waste Matrix Code | S3114                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                   |             |
|-------------------------------------|-------------------|-------------|
| Container Type                      | Ref. Waste Stream | Volume      |
| SWB w/ 4 - 55-gal Drums w/ Liners   | ID-RF-S3114-S     | 18.9        |
| TDOP w/ 10 - 55-gal Drums w/ Liners | ID-RF-S3114-S     | 76.6        |
| <b>Emplaced Total</b>               |                   | <b>95.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.08                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 3.36                                 |
| Other Inorganic Materials       | 3.54                                 |
| Cellulosics                     | 0.02                                 |
| Rubber                          | 1.63                                 |
| Plastics                        | 1.26                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 331.92                               |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 216.39                               |
| Packaging Material, Plastic     | 16.14                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.87E-02                                   |
| Cs-137  | 1.52E-08                                   |
| Np-237  | 1.30E-06                                   |
| Pu-238  | 4.85E-03                                   |
| Pu-239  | 1.42E-01                                   |
| Pu-240  | 3.03E-02                                   |
| Pu-241  | 2.90E-01                                   |
| Pu-242  | 2.70E-06                                   |
| Sr-90   | 2.54E-08                                   |
| U-234   | 4.20E-06                                   |
| U-235   | 1.15E-07                                   |
| U-238   | 9.18E-07                                   |

## Haz. Waste No(s).

D022, D026, D027,  
D028, D029, D030,  
D032, D034, D036,  
D037, F001, F002,  
F005

## TRUCON Code(s)

112/212

## Waste Stream Description

N/A

Waste Stream ID: **WP-ID-RF-S3150-A**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                       |                       |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3150                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner         | ID-RF-S3150-A-S   | 68.4         |
| SWB w/ 4 - 55-gal Drums w/ Liners   | ID-RF-S3150-A-S   | 83.2         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | ID-RF-S3150-A-S   | 14.4         |
| <b>Emplaced Total</b>               |                   | <b>166.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.01                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 25.73                                |
| Other Inorganic Materials       | 4.25                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 2.35                                 |
| Plastics                        | 3.15                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 636.61                               |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 178.56                               |
| Packaging Material, Plastic     | 24.82                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.58E-01                                   |
| Cs-137  | 9.08E-08                                   |
| Np-237  | 8.78E-06                                   |
| Pu-238  | 3.59E-02                                   |
| Pu-239  | 7.78E-01                                   |
| Pu-240  | 1.72E-01                                   |
| Pu-241  | 1.71E+00                                   |
| Pu-242  | 1.45E-05                                   |
| Sr-90   | 1.56E-07                                   |
| Th-229  | 1.79E-15                                   |
| Th-230  | 3.05E-08                                   |
| Th-232  | 1.26E-19                                   |
| U-233   | 3.81E-11                                   |
| U-234   | 3.39E-03                                   |
| U-235   | 5.19E-07                                   |
| U-236   | 5.11E-09                                   |
| U-238   | 1.11E-06                                   |

## Haz. Waste No(s).

D022, D028, D029, D030, D032, D034, D036, D043, F001, F002, F005

## TRUCON Code(s)

112/212

## Waste Stream Description

N/A

Waste Stream ID: **WP-ID-RF-S5100-A**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                                       |                 |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5100      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner         | ID-RF-S5100-A-S   | 122.5        |
| SWB w/ 4 - 55-gal Drums w/ Liners   | ID-RF-S5100-A-S   | 5.7          |
| TDOP w/ 10 - 55-gal Drums w/ Liners | ID-RF-S5100-A-S   | 397.6        |
| <b>Emplaced Total</b>               |                   | <b>525.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.02                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 113.17                               |
| Cellulosics                     | 14.07                                |
| Rubber                          | 0.01                                 |
| Plastics                        | 8.26                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.16                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 197.38                               |
| Packaging Material, Plastic     | 20.97                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.09E-01                                   |
| Cs-137  | 1.70E-08                                   |
| Np-237  | 1.07E-06                                   |
| Pu-238  | 1.61E-02                                   |
| Pu-239  | 4.70E-01                                   |
| Pu-240  | 1.08E-01                                   |
| Pu-241  | 7.16E-01                                   |
| Pu-242  | 9.01E-06                                   |
| Sr-90   | 2.87E-08                                   |
| Th-229  | 1.84E-10                                   |
| Th-230  | 1.55E-11                                   |
| Th-232  | 7.88E-20                                   |
| U-233   | 1.96E-06                                   |
| U-234   | 1.75E-06                                   |
| U-235   | 4.44E-08                                   |
| U-236   | 3.19E-09                                   |
| U-238   | 8.56E-09                                   |

## Haz. Waste No(s).

D008, D009, D022,  
F001, F002, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-ID-RF-S5126**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                                       |                 |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5126      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner         | ID-RF-S5126-S     | 47.0         |
| 55-gal Drum Dir Ld w/o Liner        | ID-RF-S5126-S     | 0.4          |
| SWB w/ 4 - 55-gal Drums w/ Liners   | ID-RF-S5126-S     | 5.7          |
| TDOP w/ 10 - 55-gal Drums w/ Liners | ID-RF-S5126-S     | 95.8         |
| <b>Emplaced Total</b>               |                   | <b>148.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.57                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.03                                 |
| Other Inorganic Materials       | 220.35                               |
| Cellulosics                     | 6.52                                 |
| Rubber                          | 0.04                                 |
| Plastics                        | 4.64                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 189.77                               |
| Packaging Material, Plastic     | 22.66                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.32E-01                                   |
| Cs-137  | 6.56E-03                                   |
| Np-237  | 1.30E-05                                   |
| Pu-238  | 1.29E-01                                   |
| Pu-239  | 3.49E+00                                   |
| Pu-240  | 8.12E-01                                   |
| Pu-241  | 6.68E+00                                   |
| Pu-242  | 6.65E-05                                   |
| Sr-90   | 9.10E-08                                   |
| Th-229  | 1.35E-07                                   |
| Th-230  | 1.01E-09                                   |
| Th-232  | 5.95E-19                                   |
| U-233   | 1.44E-03                                   |
| U-234   | 1.12E-04                                   |
| U-235   | 8.55E-08                                   |
| U-236   | 2.41E-08                                   |
| U-238   | 1.00E-14                                   |

## Haz. Waste No(s).

D008, D029, F001,  
F002, F005

## TRUCON Code(s)

115/215

## Waste Stream Description

N/A

Waste Stream ID: **WP-ID-RF-S5300-A**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                                       |                 |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5300      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                     |                   |               |
|--------------------------------------|-------------------|---------------|
| Container Type                       | Ref. Waste Stream | Volume        |
| SWB w/ 4 - 55-gal Drums w/ Liners    | ID-RF-S5300-A-S   | 43.5          |
| SWB w/ 4 - 55-gal Drums w/o Liners   | ID-RF-S5300-A-S   | 1.9           |
| TDOP w/ 10 - 55-gal Drums w/ Liners  | ID-RF-S5300-A-S   | 1379.5        |
| TDOP w/ 10 - 55-gal Drums w/o Liners | ID-RF-S5300-A-S   | 4.8           |
| <b>Emplaced Total</b>                |                   | <b>1429.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 3.81                                 |
| Aluminum-based Metals/Alloys    | 0.20                                 |
| Other Metals                    | 0.37                                 |
| Other Inorganic Materials       | 6.63                                 |
| Cellulosics                     | 49.18                                |
| Rubber                          | 4.06                                 |
| Plastics                        | 52.32                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 217.49                               |
| Packaging Material, Plastic     | 16.03                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.14E-02                                   |
| Am-243  | 1.20E-11                                   |
| Cm-244  | 3.71E-04                                   |
| Cs-137  | 9.10E-09                                   |
| Np-237  | 2.37E-06                                   |
| Pu-238  | 3.67E-03                                   |
| Pu-239  | 1.10E-01                                   |
| Pu-240  | 2.48E-02                                   |
| Pu-241  | 1.23E+00                                   |
| Pu-242  | 2.52E-06                                   |
| Sr-90   | 1.28E-08                                   |
| U-233   | 2.00E-04                                   |
| U-234   | 1.42E-05                                   |
| U-235   | 3.75E-07                                   |
| U-238   | 5.81E-07                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D029, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

116/216

## Waste Stream Description

N/A

Waste Stream ID: **WP-INW161.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                                       |                     |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Inorganic Non-Metal | Waste Matrix Code | S5123      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | INW161.001-S      | 19.1        |
| <b>Emplaced Total</b>       |                   | <b>19.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.05                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.43                                 |
| Other Inorganic Materials       | 247.58                               |
| Cellulosics                     | 24.03                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 6.05                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.29E+00                                   |
| Np-237  | 1.60E-06                                   |
| Pu-238  | 2.78E-01                                   |
| Pu-239  | 8.21E+00                                   |
| Pu-240  | 1.86E+00                                   |
| Pu-241  | 1.71E+01                                   |
| Pu-242  | 1.84E-04                                   |
| Th-229  | 1.66E-15                                   |
| Th-230  | 6.31E-10                                   |
| Th-232  | 2.18E-17                                   |
| U-233   | 1.34E-11                                   |
| U-234   | 1.91E-05                                   |
| U-235   | 4.61E-06                                   |
| U-236   | 2.20E-07                                   |
| U-238   | 2.90E-07                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F003, F005, F006, F007, F009

## TRUCON Code(s)

122/222, 125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-INW169.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                                       |                 |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5330      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | INW169.001-S      | 19.1        |
| <b>Emplaced Total</b>       |                   | <b>19.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.24                                 |
| Aluminum-based Metals/Alloys    | 0.05                                 |
| Other Metals                    | 3.52                                 |
| Other Inorganic Materials       | 7.37                                 |
| Cellulosics                     | 130.27                               |
| Rubber                          | 0.73                                 |
| Plastics                        | 7.38                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.40E-01                                   |
| Np-237  | 3.01E-07                                   |
| Pu-238  | 3.46E-02                                   |
| Pu-239  | 1.03E+00                                   |
| Pu-240  | 2.30E-01                                   |
| Pu-241  | 2.38E+00                                   |
| Pu-242  | 3.09E-05                                   |
| Th-229  | 3.14E-16                                   |
| Th-230  | 5.67E-10                                   |
| Th-232  | 2.69E-18                                   |
| U-233   | 2.53E-12                                   |
| U-234   | 1.59E-05                                   |
| U-235   | 3.78E-06                                   |
| U-236   | 2.72E-08                                   |
| U-238   | 2.29E-07                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D011, D022,  
F001, F002, F003,  
F005, F006, F007,  
F009

## TRUCON Code(s)

116/216

## Waste Stream Description

N/A



Waste Stream ID: **WP-INW198.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                                       |                 |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5310      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | INW198.001-S      | 49.1        |
| <b>Emplaced Total</b>       |                   | <b>49.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.17                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 2.55                                 |
| Other Inorganic Materials       | 13.60                                |
| Cellulosics                     | 0.44                                 |
| Rubber                          | 0.53                                 |
| Plastics                        | 86.81                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.22E-01                                   |
| Np-237  | 1.51E-07                                   |
| Pu-238  | 2.44E-02                                   |
| Pu-239  | 7.70E-01                                   |
| Pu-240  | 1.72E-01                                   |
| Pu-241  | 1.62E+00                                   |
| Pu-242  | 1.81E-05                                   |
| Th-229  | 1.99E-09                                   |
| Th-230  | 1.09E-10                                   |
| Th-232  | 2.02E-18                                   |
| U-233   | 5.30E-06                                   |
| U-234   | 3.17E-06                                   |
| U-235   | 7.28E-07                                   |
| U-236   | 2.04E-08                                   |
| U-238   | 1.20E-06                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D011, D022,  
F001, F002, F003,  
F005, F006, F007,  
F009

## TRUCON Code(s)

116/216

## Waste Stream Description

N/A

Waste Stream ID: **WP-INW211.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                       |                 |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Filter          | Waste Matrix Code | S5410                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                  |                   |              |
|-----------------------------------|-------------------|--------------|
| Container Type                    | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner       | INW211.001-S      | 299.9        |
| 55-gal Drum Dir Ld w/o Liner      | INW211.001-S      | 0.2          |
| SWB w/ 4 - 55-gal Drums w/ Liners | INW211.001-S      | 3.8          |
| <b>Emplaced Total</b>             |                   | <b>303.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.05                                 |
| Aluminum-based Metals/Alloys    | 8.60                                 |
| Other Metals                    | 0.41                                 |
| Other Inorganic Materials       | 22.38                                |
| Cellulosics                     | 136.35                               |
| Rubber                          | 0.08                                 |
| Plastics                        | 7.29                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.01                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 131.80                               |
| Packaging Material, Plastic     | 36.72                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.41E+00                                   |
| Np-237  | 2.99E-06                                   |
| Pu-238  | 4.37E-01                                   |
| Pu-239  | 1.20E+01                                   |
| Pu-240  | 2.67E+00                                   |
| Pu-241  | 3.21E+01                                   |
| Pu-242  | 4.62E-04                                   |
| Th-229  | 1.60E-08                                   |
| Th-230  | 5.35E-10                                   |
| Th-232  | 3.13E-17                                   |
| U-233   | 4.26E-05                                   |
| U-234   | 1.74E-05                                   |
| U-235   | 3.14E-06                                   |
| U-236   | 3.17E-07                                   |
| U-238   | 4.84E-06                                   |

## Haz. Waste No(s).

D005, D007, D008, D009, D011, D022, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

119/219

## Waste Stream Description

N/A

Waste Stream ID: **WP-INW216.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                                       |                       |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3121      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                        |                   |               |
|---|-------------------|---------------|
| Container Type                          | Ref. Waste Stream | Volume        |
| 55-gal Drum Dir Ld w/ Liner             | INW216.001-S      | 1227.4        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | INW216.001-S      | 0.6           |
| SWB Dir Ld w/o Liner                    | INW216.001-S      | 11.3          |
| SWB w/ 4 - 55-gal Drums w/ Liners       | INW216.001-S      | 5.7           |
| <b>Emplaced Total</b>                   |                   | <b>1245.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.01                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.08                                 |
| Other Inorganic Materials       | 12.65                                |
| Cellulosics                     | 0.19                                 |
| Rubber                          | 0.01                                 |
| Plastics                        | 0.53                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 829.38                               |
| Organic Matrix                  | 0.18                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 131.41                               |
| Packaging Material, Plastic     | 36.56                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.58E+01                                   |
| Np-237  | 7.45E-05                                   |
| Pu-238  | 9.01E-02                                   |
| Pu-239  | 2.62E+00                                   |
| Pu-240  | 5.88E-01                                   |
| Pu-241  | 6.53E+00                                   |
| Pu-242  | 9.49E-05                                   |
| Th-229  | 1.26E-08                                   |
| Th-230  | 2.25E-08                                   |
| Th-232  | 1.08E-17                                   |
| U-233   | 2.69E-05                                   |
| U-234   | 5.00E-04                                   |
| U-235   | 8.28E-05                                   |
| U-236   | 8.72E-08                                   |
| U-238   | 3.12E-03                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

111/211, 116/216

## Waste Stream Description

N/A

Waste Stream ID: **WP-INW218.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                       |                       |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3121                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                  |                   |               |
|-----------------------------------|-------------------|---------------|
| Container Type                    | Ref. Waste Stream | Volume        |
| 55-gal Drum Dir Ld w/ Liner       | INW218.001-S      | 833.0         |
| SWB Dir Ld w/o Liner              | INW218.001-S      | 275.9         |
| SWB w/ 4 - 55-gal Drums w/ Liners | INW218.001-S      | 1.9           |
| <b>Emplaced Total</b>             |                   | <b>1110.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.01                                 |
| Other Inorganic Materials       | 16.30                                |
| Cellulosics                     | 0.16                                 |
| Rubber                          | 0.01                                 |
| Plastics                        | 1.25                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 753.19                               |
| Organic Matrix                  | 0.19                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 136.58                               |
| Packaging Material, Plastic     | 27.77                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.45E-01                                   |
| Np-237  | 1.20E-06                                   |
| Pu-238  | 1.51E-02                                   |
| Pu-239  | 4.48E-01                                   |
| Pu-240  | 1.00E-01                                   |
| Pu-241  | 1.10E+00                                   |
| Pu-242  | 1.53E-05                                   |
| Th-229  | 4.70E-09                                   |
| Th-230  | 3.74E-08                                   |
| Th-232  | 1.83E-18                                   |
| U-233   | 1.00E-05                                   |
| U-234   | 8.32E-04                                   |
| U-235   | 9.20E-05                                   |
| U-236   | 1.48E-08                                   |
| U-238   | 7.87E-03                                   |

## Haz. Waste No(s).

D006, D007, D008, D009, D010, D011, D032, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

111/211, 116/216

## Waste Stream Description

N/A

Waste Stream ID: **WP-INW222.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                       |                       |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3150                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | INW222.001-S      | 65.1        |
| <b>Emplaced Total</b>       |                   | <b>65.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.03                                 |
| Other Inorganic Materials       | 0.76                                 |
| Cellulosics                     | 0.04                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 16.36                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 566.62                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.10E-01                                   |
| Np-237  | 1.01E-06                                   |
| Pu-238  | 1.53E-01                                   |
| Pu-239  | 4.36E+00                                   |
| Pu-240  | 9.80E-01                                   |
| Pu-241  | 1.00E+01                                   |
| Pu-242  | 1.14E-04                                   |
| Th-229  | 1.05E-15                                   |
| Th-230  | 5.05E-10                                   |
| Th-232  | 1.15E-17                                   |
| U-233   | 8.44E-12                                   |
| U-234   | 1.49E-05                                   |
| U-235   | 1.62E-06                                   |
| U-236   | 1.16E-07                                   |
| U-238   | 1.08E-04                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, F001, F002, F003, F005, F006, F007, F009

## TRUCON Code(s)

111/211, 125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-INW243.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                       |                     |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5122                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | INW243.001-S      | 73.8        |
| 55-gal Drum Dir Ld w/o Liner | INW243.001-S      | 1.0         |
| <b>Emplaced Total</b>        |                   | <b>74.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.37                                 |
| Aluminum-based Metals/Alloys    | 0.01                                 |
| Other Metals                    | 11.00                                |
| Other Inorganic Materials       | 163.61                               |
| Cellulosics                     | 0.58                                 |
| Rubber                          | 0.10                                 |
| Plastics                        | 23.80                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 36.49                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.88E-01                                   |
| Np-237  | 1.55E-06                                   |
| Pu-238  | 1.37E-01                                   |
| Pu-239  | 3.16E+00                                   |
| Pu-240  | 7.07E-01                                   |
| Pu-241  | 7.68E+00                                   |
| Pu-242  | 9.10E-05                                   |
| Th-229  | 1.55E-08                                   |
| Th-230  | 1.15E-09                                   |
| Th-232  | 1.29E-17                                   |
| U-233   | 3.30E-05                                   |
| U-234   | 2.65E-05                                   |
| U-235   | 5.99E-06                                   |
| U-236   | 1.05E-07                                   |
| U-238   | 4.24E-06                                   |

## Haz. Waste No(s).

D005, D008, D009,  
D022, F001, F002,  
F005

## TRUCON Code(s)

118/218, 125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-INW247.001R1**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                                       |                     |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Inorganic Non-Metal | Waste Matrix Code | S5122      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |              |
|------------------------------|-------------------|--------------|
| Container Type               | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner  | INW247.001R1-S    | 112.7        |
| 55-gal Drum Dir Ld w/o Liner | INW247.001R1-S    | 4.2          |
| <b>Emplaced Total</b>        |                   | <b>116.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.15                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.01                                 |
| Other Inorganic Materials       | 233.57                               |
| Cellulosics                     | 19.55                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.28                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 35.68                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.32E-01                                   |
| Np-237  | 1.13E-06                                   |
| Pu-238  | 2.09E-01                                   |
| Pu-239  | 3.55E+00                                   |
| Pu-240  | 8.10E-01                                   |
| Pu-241  | 8.98E+00                                   |
| Pu-242  | 6.77E-05                                   |
| Th-229  | 3.02E-08                                   |
| Th-230  | 7.74E-11                                   |
| Th-232  | 1.48E-17                                   |
| U-233   | 6.45E-05                                   |
| U-234   | 3.22E-06                                   |
| U-235   | 6.88E-08                                   |
| U-236   | 1.20E-07                                   |
| U-238   | 5.11E-14                                   |

## Haz. Waste No(s).

D008, F001, F002

## TRUCON Code(s)

118/218, 125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-INW252.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                                       |                 |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5311      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | INW252.001-S      | 60.9        |
| <b>Emplaced Total</b>       |                   | <b>60.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 207.33                               |
| Other Inorganic Materials       | 4.03                                 |
| Cellulosics                     | 0.10                                 |
| Rubber                          | 208.17                               |
| Plastics                        | 3.38                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.64E-01                                   |
| Np-237  | 1.05E-06                                   |
| Pu-238  | 1.98E-01                                   |
| Pu-239  | 4.95E+00                                   |
| Pu-240  | 1.12E+00                                   |
| Pu-241  | 1.74E+01                                   |
| Pu-242  | 1.12E-04                                   |
| Th-229  | 1.07E-15                                   |
| Th-230  | 4.96E-10                                   |
| Th-232  | 1.32E-17                                   |
| U-233   | 8.67E-12                                   |
| U-234   | 1.49E-05                                   |
| U-235   | 3.71E-06                                   |
| U-236   | 1.33E-07                                   |
| U-238   | 6.75E-14                                   |

## Haz. Waste No(s).

D008, D022, F001, F002, F003, F005, F006, F007, F009

## TRUCON Code(s)

123/223

## Waste Stream Description

N/A



Waste Stream ID: **WP-INW276.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                                       |                 |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5126      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | INW276.001-S      | 10.2        |
| <b>Emplaced Total</b>       |                   | <b>10.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 329.28                               |
| Cellulosics                     | 4.61                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 3.73                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.32E-01                                   |
| Np-237  | 1.37E-06                                   |
| Pu-238  | 2.26E-01                                   |
| Pu-239  | 3.12E+00                                   |
| Pu-240  | 7.11E-01                                   |
| Pu-241  | 7.96E+00                                   |
| Pu-242  | 6.42E-05                                   |
| Th-229  | 6.91E-15                                   |
| Th-230  | 2.45E-10                                   |
| Th-232  | 4.22E-17                                   |
| U-233   | 2.52E-11                                   |
| U-234   | 5.98E-06                                   |
| U-235   | 5.33E-08                                   |
| U-236   | 1.90E-07                                   |
| U-238   | 8.72E-14                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

115/215

## Waste Stream Description

N/A

Waste Stream ID: **WP-INW276.002**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                       |                 |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5126                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | INW276.002-S      | 16.0        |
| <b>Emplaced Total</b>       |                   | <b>16.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 320.62                               |
| Cellulosics                     | 8.74                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.34E-01                                   |
| Np-237  | 1.24E-06                                   |
| Pu-238  | 2.17E-01                                   |
| Pu-239  | 2.98E+00                                   |
| Pu-240  | 6.79E-01                                   |
| Pu-241  | 7.95E+00                                   |
| Pu-242  | 6.13E-05                                   |
| Th-229  | 3.42E-08                                   |
| Th-230  | 1.99E-10                                   |
| Th-232  | 3.18E-17                                   |
| U-233   | 4.56E-05                                   |
| U-234   | 5.28E-06                                   |
| U-235   | 7.10E-08                                   |
| U-236   | 1.61E-07                                   |
| U-238   | 7.40E-14                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

115/215

## Waste Stream Description

N/A

Waste Stream ID: **WP-INW276.003**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                       |                 |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5126                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |              |
|------------------------------|-------------------|--------------|
| Container Type               | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner  | INW276.003-S      | 182.6        |
| 55-gal Drum Dir Ld w/o Liner | INW276.003-S      | 4.0          |
| <b>Emplaced Total</b>        |                   | <b>186.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.04                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.04                                 |
| Other Inorganic Materials       | 329.25                               |
| Cellulosics                     | 8.62                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.35                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 36.22                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.69E+00                                   |
| Np-237  | 3.01E-06                                   |
| Pu-238  | 6.91E-01                                   |
| Pu-239  | 9.25E+00                                   |
| Pu-240  | 2.11E+00                                   |
| Pu-241  | 2.76E+01                                   |
| Pu-242  | 1.96E-04                                   |
| Th-229  | 1.57E-07                                   |
| Th-230  | 3.77E-10                                   |
| Th-232  | 5.56E-17                                   |
| U-233   | 2.79E-04                                   |
| U-234   | 1.29E-05                                   |
| U-235   | 2.65E-07                                   |
| U-236   | 3.75E-07                                   |
| U-238   | 6.00E-09                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

115/215, 125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-INW276.004**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                                       |                 |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5126      | Handling | CH |
| Source Cat. | N/A                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | INW276.004-S      | 42.4        |
| 55-gal Drum Dir Ld w/o Liner | INW276.004-S      | 4.4         |
| <b>Emplaced Total</b>        |                   | <b>46.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.25                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.17                                 |
| Other Inorganic Materials       | 327.99                               |
| Cellulosics                     | 2.14                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 3.07                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 33.55                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.64E+00                                   |
| Np-237  | 2.97E-06                                   |
| Pu-238  | 5.76E-01                                   |
| Pu-239  | 7.84E+00                                   |
| Pu-240  | 1.79E+00                                   |
| Pu-241  | 2.30E+01                                   |
| Pu-242  | 1.63E-04                                   |
| Th-229  | 5.45E-07                                   |
| Th-230  | 4.32E-10                                   |
| Th-232  | 4.71E-17                                   |
| U-233   | 9.69E-04                                   |
| U-234   | 1.30E-05                                   |
| U-235   | 6.52E-07                                   |
| U-236   | 3.18E-07                                   |
| U-238   | 1.48E-13                                   |

## Haz. Waste No(s).

D008, D029, D040,  
F001, F002, F005

## TRUCON Code(s)

115/215, 125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-INW296.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                           |                       |                          |                   |                                       |          |    |
|-------------|---------------------------|-----------------------|--------------------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form      | Lead/Cadmium Metal Waste | Waste Matrix Code | S5112                                 | Handling | CH |
| Source Cat. | N/A                       | Defense Determination | Defense-Related          | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                       |                       |                          |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | INW296.001-S      | 93.2        |
| 55-gal Drum Dir Ld w/o Liner | INW296.001-S      | 4.6         |
| <b>Emplaced Total</b>        |                   | <b>97.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 5.43                                 |
| Aluminum-based Metals/Alloys    | 0.39                                 |
| Other Metals                    | 220.74                               |
| Other Inorganic Materials       | 11.39                                |
| Cellulosics                     | 0.93                                 |
| Rubber                          | 1.78                                 |
| Plastics                        | 4.31                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 35.27                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.56E+00                                   |
| Np-237  | 2.44E-06                                   |
| Pu-238  | 2.94E-01                                   |
| Pu-239  | 5.25E+00                                   |
| Pu-240  | 1.19E+00                                   |
| Pu-241  | 1.34E+01                                   |
| Pu-242  | 1.13E-04                                   |
| Th-229  | 4.86E-08                                   |
| Th-230  | 4.05E-10                                   |
| Th-232  | 2.18E-17                                   |
| U-233   | 1.04E-04                                   |
| U-234   | 1.11E-05                                   |
| U-235   | 1.58E-06                                   |
| U-236   | 1.76E-07                                   |
| U-238   | 4.05E-06                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D011, D028,  
F001, F002, F003,  
F005, F006, F007,  
F009

## TRUCON Code(s)

117/217, 125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-LA-MHD01.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                                |                       |                 |                   |                                       |          |    |
|-------------|--------------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | N/A                            | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                            |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                   |                   |        |
|------------------------------------|-------------------|--------|
| Container Type                     | Ref. Waste Stream | Volume |
| 55-gal Drum Dir Ld w/ Liner        | LA-MHD01.001-S    | 186.4  |
| 55-gal Drum Dir Ld w/o Liner       | LA-MHD01.001-S    | 215.9  |
| SWB w/ 4 - 55-gal Drums w/ Liners  | LA-MHD01.001-S    | 77.5   |
| SWB w/ 4 - 55-gal Drums w/o Liners | LA-MHD01.001-S    | 7.6    |

|                       |              |
|-----------------------|--------------|
| <b>Emplaced Total</b> | <b>487.3</b> |
|-----------------------|--------------|

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 89.93                                |
| Aluminum-based Metals/Alloys    | 0.32                                 |
| Other Metals                    | 10.63                                |
| Other Inorganic Materials       | 54.57                                |
| Cellulosics                     | 7.46                                 |
| Rubber                          | 10.79                                |
| Plastics                        | 33.73                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.28                                 |
| Organic Matrix                  | 0.05                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 144.81                               |
| Packaging Material, Plastic     | 16.74                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.99E+00                                   |
| Am-243  | 1.73E-03                                   |
| Cm-244  | 6.49E-03                                   |
| Cs-137  | 1.52E-06                                   |
| Np-237  | 3.42E-04                                   |
| Pu-238  | 7.98E+00                                   |
| Pu-239  | 8.45E+01                                   |
| Pu-240  | 3.96E+00                                   |
| Pu-241  | 5.51E+02                                   |
| Pu-242  | 2.98E-03                                   |
| Sr-90   | 2.01E-03                                   |
| Th-229  | 9.79E-08                                   |
| Th-230  | 1.74E-05                                   |
| Th-232  | 9.27E-09                                   |
| U-233   | 1.04E-03                                   |
| U-234   | 1.47E-03                                   |
| U-235   | 4.78E-06                                   |
| U-236   | 1.17E-07                                   |
| U-238   | 4.51E-06                                   |

## Haz. Waste No(s).

D004, D005, D006,  
D007, D008, D009,  
D010, D011, D018,  
D019, D021, D022,  
D035, D038, D039,  
D040, F001, F002,  
F005

## TRUCON Code(s)

116/216, 117/217,  
123/223, 125/225,  
154

## Waste Stream Description

N/A

Waste Stream ID: **WP-LA-MHD02.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                                |                                       |                 |                   |            |          |    |
|-------------|--------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | N/A                            | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                            | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | LA-MHD02.001-S    | 5.0         |
| 55-gal Drum Dir Ld w/o Liner | LA-MHD02.001-S    | 8.5         |
| <b>Emplaced Total</b>        |                   | <b>13.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 78.72                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 3.17                                 |
| Other Inorganic Materials       | 17.11                                |
| Cellulosics                     | 3.40                                 |
| Rubber                          | 25.27                                |
| Plastics                        | 31.33                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 13.66                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.32E-01                                   |
| Am-243  | 2.96E-06                                   |
| Cs-137  | 1.80E-07                                   |
| Np-237  | 6.12E-06                                   |
| Pu-238  | 1.32E+02                                   |
| Pu-239  | 1.03E-01                                   |
| Pu-240  | 5.19E-02                                   |
| Pu-241  | 5.04E-01                                   |
| Pu-242  | 5.31E-05                                   |
| Sr-90   | 1.81E-07                                   |
| U-233   | 1.89E-07                                   |
| U-234   | 2.45E-02                                   |
| U-235   | 4.68E-08                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F005

## TRUCON Code(s)

125/225, 154

## Waste Stream Description

N/A

Waste Stream ID: **WP-LA-MHD03.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                                |                       |                 |                   |                                       |          |    |
|-------------|--------------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | N/A                            | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                            |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | LA-MHD03.001-S    | 0.2         |
| 55-gal Drum Dir Ld w/o Liner | LA-MHD03.001-S    | 46.8        |
| <b>Emplaced Total</b>        |                   | <b>47.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 9.76                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 1.79                                 |
| Other Inorganic Materials       | 29.17                                |
| Cellulosics                     | 19.46                                |
| Rubber                          | 1.31                                 |
| Plastics                        | 56.35                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.16                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.20E-01                                   |
| Am-243  | 6.60E-05                                   |
| Cs-137  | 4.12E-05                                   |
| Np-237  | 6.28E-05                                   |
| Pu-238  | 1.20E+00                                   |
| Pu-239  | 5.33E-01                                   |
| Pu-240  | 1.51E-01                                   |
| Pu-241  | 2.41E+00                                   |
| Pu-242  | 5.47E-05                                   |
| Sr-90   | 4.12E-05                                   |
| U-234   | 1.60E-04                                   |
| U-235   | 5.30E-07                                   |
| U-238   | 3.20E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D026, D027, D028, D029, D030, D035, D036, D037, D038, D039, D040, D043, F001, F002, F004, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A



Waste Stream ID: **WP-LA-MIN03-NC.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                                |                                       |                       |                   |            |          |    |
|-------------|--------------------------------|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3120      | Handling | CH |
| Source Cat. | N/A                            | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                            | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                  |                   |              |
|-----------------------------------|-------------------|--------------|
| Container Type                    | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner       | LA-MIN03-NC.001-S | 235.5        |
| SWB w/ 4 - 55-gal Drums w/ Liners | LA-MIN03-NC.001-S | 13.2         |
| <b>Emplaced Total</b>             |                   | <b>248.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 3.94                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.68                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 3.86                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 718.04                               |
| Organic Matrix                  | 1.34                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 135.07                               |
| Packaging Material, Plastic     | 35.90                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.39E-01                                   |
| Am-243  | 1.18E-06                                   |
| Cs-137  | 1.45E-04                                   |
| Np-237  | 7.42E-06                                   |
| Pu-238  | 2.44E-02                                   |
| Pu-239  | 4.33E-01                                   |
| Pu-240  | 6.34E-02                                   |
| Pu-241  | 1.03E+00                                   |
| Pu-242  | 6.36E-05                                   |
| Sr-90   | 1.10E-04                                   |
| Th-229  | 7.28E-14                                   |
| Th-230  | 3.45E-10                                   |
| Th-232  | 4.64E-20                                   |
| U-233   | 7.92E-10                                   |
| U-234   | 3.84E-05                                   |
| U-235   | 9.88E-07                                   |
| U-236   | 1.88E-09                                   |
| U-238   | 3.19E-07                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D037, F001, F002, F004, F005, F006, F007, F009

## TRUCON Code(s)

111/211

## Waste Stream Description

N/A

Waste Stream ID: **WP-LA-OS-00-01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                                |                       |                 |                   |                                       |          |    |
|-------------|--------------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5100                                 | Handling | CH |
| Source Cat. | N/A                            | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                            |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes           |                   |            |
|----------------------------|-------------------|------------|
| Container Type             | Ref. Waste Stream | Volume     |
| 55-gal POC - 12" w/o Liner | LA-OS-00-01-S     | 0.4        |
| <b>Emplaced Total</b>      |                   | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 130.77                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.96                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 137.50                               |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 527.40                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 137.50                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.30E+00                                   |
| Cs-137  | 6.32E-04                                   |
| Np-237  | 3.65E-05                                   |
| Pu-238  | 4.20E+00                                   |
| Pu-239  | 1.15E+01                                   |
| Pu-240  | 1.17E+01                                   |
| Pu-241  | 1.41E+01                                   |
| Pu-242  | 2.32E-04                                   |
| Sr-90   | 5.91E-04                                   |
| Th-229  | 9.89E-14                                   |
| Th-230  | 2.24E-01                                   |
| Th-232  | 1.37E-16                                   |
| U-233   | 5.51E-10                                   |
| U-234   | 4.84E-05                                   |
| U-235   | 4.53E-08                                   |
| U-236   | 1.39E-06                                   |
| U-238   | 1.40E-13                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

120/220

## Waste Stream Description

N/A

Waste Stream ID: **WP-LA-OS-00-01.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                                |                       |                 |                   |                                       |          |    |
|-------------|--------------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5100                                 | Handling | CH |
| Source Cat. | N/A                            | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                            |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes              |                   |             |
|-------------------------------|-------------------|-------------|
| Container Type                | Ref. Waste Stream | Volume      |
| 55-gal POC - 12" w/ Liner     | LA-OS-00-01.001-S | 60.9        |
| 55-gal S100 POC - 6" w/ Liner | LA-OS-00-01.001-S | 14.8        |
| <b>Emplaced Total</b>         |                   | <b>75.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 18.96                                |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 487.08                               |
| Packaging Material, Plastic     | 168.86                               |
| Packaging Material, Cellulosics | 124.28                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.34E+00                                   |
| Cs-137  | 2.05E-03                                   |
| Pu-238  | 8.56E+01                                   |
| Pu-239  | 9.20E+00                                   |
| Pu-240  | 2.76E+00                                   |
| Pu-241  | 9.30E+00                                   |
| Pu-242  | 7.47E-04                                   |
| Sr-90   | 1.76E-03                                   |
| U-233   | 3.09E-09                                   |
| U-234   | 7.17E-03                                   |
| U-235   | 3.83E-07                                   |
| U-238   | 1.30E-08                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

120/220

## Waste Stream Description

N/A

Waste Stream ID: **WP-LA-TA-55-19.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                                |                       |                 |                   |                                       |          |    |
|-------------|--------------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | N/A                            | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                            |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | LA-TA-55-19.01-S  | 0.2         |
| 55-gal Drum Dir Ld w/o Liner | LA-TA-55-19.01-S  | 5.6         |
| SWB Dir Ld w/o Liner         | LA-TA-55-19.01-S  | 75.6        |
| <b>Emplaced Total</b>        |                   | <b>81.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 51.12                                |
| Aluminum-based Metals/Alloys    | 0.03                                 |
| Other Metals                    | 0.10                                 |
| Other Inorganic Materials       | 0.27                                 |
| Cellulosics                     | 6.20                                 |
| Rubber                          | 2.18                                 |
| Plastics                        | 26.49                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 151.88                               |
| Packaging Material, Plastic     | 0.09                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.02E-01                                   |
| Am-243  | 5.37E-05                                   |
| Cs-137  | 1.13E-08                                   |
| Np-237  | 4.87E-05                                   |
| Pu-238  | 2.49E-01                                   |
| Pu-239  | 3.06E+00                                   |
| Pu-240  | 7.56E-01                                   |
| Pu-241  | 7.48E+00                                   |
| Pu-242  | 2.05E-03                                   |
| Th-229  | 3.45E-13                                   |
| Th-230  | 4.19E-07                                   |
| Th-232  | 1.99E-17                                   |
| U-233   | 1.23E-09                                   |
| U-234   | 1.45E-03                                   |
| U-235   | 2.80E-06                                   |
| U-236   | 1.34E-07                                   |
| U-238   | 4.75E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

## TRUCON Code(s)

116/216, 125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-LA-TA-55-19.02**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                                |                       |                 |                   |                                       |          |    |
|-------------|--------------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5300                                 | Handling | CH |
| Source Cat. | N/A                            | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                            |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                   |                   |              |
|------------------------------------|-------------------|--------------|
| Container Type                     | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner        | LA-TA-55-19.02-S  | 16.0         |
| 55-gal Drum Dir Ld w/o Liner       | LA-TA-55-19.02-S  | 171.4        |
| SWB Dir Ld w/o Liner               | LA-TA-55-19.02-S  | 13.2         |
| SWB w/ 4 - 55-gal Drums w/ Liners  | LA-TA-55-19.02-S  | 1.9          |
| SWB w/ 4 - 55-gal Drums w/o Liners | LA-TA-55-19.02-S  | 26.5         |
| <b>Emplaced Total</b>              |                   | <b>229.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 10.64                                |
| Aluminum-based Metals/Alloys    | 0.02                                 |
| Other Metals                    | 0.66                                 |
| Other Inorganic Materials       | 3.05                                 |
| Cellulosics                     | 39.08                                |
| Rubber                          | 4.67                                 |
| Plastics                        | 62.20                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.03                                 |
| Soils/gravel                    | 0.18                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 142.05                               |
| Packaging Material, Plastic     | 2.72                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.63E+00                                   |
| Am-243  | 3.38E-04                                   |
| Cs-137  | 2.42E-06                                   |
| Np-237  | 9.45E-05                                   |
| Pu-238  | 8.91E-01                                   |
| Pu-239  | 3.57E+00                                   |
| Pu-240  | 9.97E-01                                   |
| Pu-241  | 1.39E+01                                   |
| Pu-242  | 5.43E-03                                   |
| Sr-90   | 2.25E-06                                   |
| Th-229  | 7.44E-09                                   |
| Th-230  | 7.46E-06                                   |
| Th-232  | 8.99E-08                                   |
| U-233   | 1.98E-05                                   |
| U-234   | 3.52E-03                                   |
| U-235   | 4.17E-06                                   |
| U-236   | 1.18E-07                                   |
| U-238   | 6.67E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

## TRUCON Code(s)

116/216, 125/225, 154

## Waste Stream Description

N/A

Waste Stream ID: **WP-LA-TA-55-30**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                                |                       |                 |                   |                                       |          |    |
|-------------|--------------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | N/A                            | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                            |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                   |                   |             |
|------------------------------------|-------------------|-------------|
| Container Type                     | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner        | LA-TA-55-30-S     | 10.6        |
| 55-gal Drum Dir Ld w/o Liner       | LA-TA-55-30-S     | 79.0        |
| SWB w/ 4 - 55-gal Drums w/o Liners | LA-TA-55-30-S     | 5.7         |
| <b>Emplaced Total</b>              |                   | <b>95.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 213.70                               |
| Aluminum-based Metals/Alloys    | 0.41                                 |
| Other Metals                    | 2.45                                 |
| Other Inorganic Materials       | 18.28                                |
| Cellulosics                     | 11.63                                |
| Rubber                          | 1.41                                 |
| Plastics                        | 14.23                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.75                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 135.58                               |
| Packaging Material, Plastic     | 4.12                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.21E+00                                   |
| Am-243  | 6.83E-05                                   |
| Cs-137  | 8.63E-05                                   |
| Np-237  | 8.27E-05                                   |
| Pu-238  | 4.74E-01                                   |
| Pu-239  | 2.59E+00                                   |
| Pu-240  | 7.30E-01                                   |
| Pu-241  | 8.66E+00                                   |
| Pu-242  | 6.28E-04                                   |
| Sr-90   | 8.60E-05                                   |
| Th-229  | 4.67E-08                                   |
| Th-230  | 4.69E-09                                   |
| Th-232  | 3.44E-07                                   |
| U-233   | 9.96E-05                                   |
| U-234   | 1.08E-04                                   |
| U-235   | 2.28E-06                                   |
| U-236   | 1.08E-07                                   |
| U-238   | 5.85E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

## TRUCON Code(s)

116/216, 117/217, 125/225, 154

## Waste Stream Description

N/A

Waste Stream ID: **WP-LA-TA-55-43.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                                |                       |                 |                   |                                       |          |    |
|-------------|--------------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Los Alamos National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | N/A                            | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                            |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes      |                   |              |
|-----------------------|-------------------|--------------|
| Container Type        | Ref. Waste Stream | Volume       |
| SWB Dir Ld w/o Liner  | LA-TA-55-43.01-S  | 190.9        |
| <b>Emplaced Total</b> |                   | <b>190.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 45.68                                |
| Aluminum-based Metals/Alloys    | 0.11                                 |
| Other Metals                    | 0.38                                 |
| Other Inorganic Materials       | 0.13                                 |
| Cellulosics                     | 1.22                                 |
| Rubber                          | 0.19                                 |
| Plastics                        | 8.86                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.70E-03                                   |
| Am-243  | 7.54E-08                                   |
| Np-237  | 2.03E-07                                   |
| Pu-238  | 2.80E+00                                   |
| Pu-239  | 2.44E-03                                   |
| Pu-240  | 4.00E-03                                   |
| Pu-241  | 2.86E-02                                   |
| Pu-242  | 2.79E-06                                   |
| Th-229  | 2.56E-15                                   |
| Th-230  | 1.50E-08                                   |
| Th-232  | 2.40E-08                                   |
| U-233   | 6.87E-12                                   |
| U-234   | 2.41E-04                                   |
| U-235   | 1.93E-11                                   |
| U-236   | 9.50E-10                                   |
| U-238   | 3.37E-15                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-BLCHDN.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Lawrence Livermore National Laboratory | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5440      | Handling | CH |
| Source Cat. | N/A                                    | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                    | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |            |
|------------------------------|-------------------|------------|
| Container Type               | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner  | BLCHDN.001-S      | 0.2        |
| 55-gal Drum Dir Ld w/o Liner | BLCHDN.001-S      | 1.5        |
| <b>Emplaced Total</b>        |                   | <b>1.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 61.42                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 13.70                                |
| Cellulosics                     | 5.41                                 |
| Rubber                          | 1.80                                 |
| Plastics                        | 40.99                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 11.12                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 4.63                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.58E-02                                   |
| Am-243  | 1.34E-03                                   |
| Cm-244  | 1.22E-01                                   |
| Np-237  | 5.38E-04                                   |
| Pu-238  | 5.28E-02                                   |
| Pu-239  | 2.19E-07                                   |
| Pu-240  | 2.69E-05                                   |
| Pu-241  | 1.47E-05                                   |
| Th-229  | 4.40E-13                                   |
| Th-230  | 2.73E-12                                   |
| Th-232  | 2.68E-23                                   |
| U-233   | 4.69E-09                                   |
| U-234   | 3.02E-07                                   |
| U-235   | 2.17E-16                                   |
| U-236   | 8.07E-13                                   |

## Haz. Waste No(s).

F005

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A



Waste Stream ID: **WP-LL-M001-S5400**

## Appendix B

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                   |                                       |          |    |
|-------------|--|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Lawrence Livermore National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | N/A                                    | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                    |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                  |                   |              |
|-----------------------------------|-------------------|--------------|
| Container Type                    | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner       | LL-M001-S5400-S   | 136.4        |
| 55-gal Drum Dir Ld w/o Liner      | LL-M001-S5400-S   | 2.9          |
| SWB w/ 4 - 55-gal Drums w/ Liners | LL-M001-S5400-S   | 3.8          |
| <b>Emplaced Total</b>             |                   | <b>143.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 88.62                                |
| Aluminum-based Metals/Alloys    | 2.36                                 |
| Other Metals                    | 3.76                                 |
| Other Inorganic Materials       | 7.07                                 |
| Cellulosics                     | 5.01                                 |
| Rubber                          | 11.09                                |
| Plastics                        | 57.87                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 14.54                                |
| Organic Matrix                  | 3.08                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 132.92                               |
| Packaging Material, Plastic     | 35.70                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.03E+00                                   |
| Am-243  | 9.47E-05                                   |
| Cm-244  | 2.21E-01                                   |
| Cs-137  | 1.47E-07                                   |
| Np-237  | 5.10E-04                                   |
| Pu-238  | 2.51E+00                                   |
| Pu-239  | 4.18E+00                                   |
| Pu-240  | 1.17E+00                                   |
| Pu-241  | 1.51E+01                                   |
| Pu-242  | 2.21E-04                                   |
| Sr-90   | 1.45E-07                                   |
| Th-229  | 4.16E-13                                   |
| Th-230  | 2.48E-09                                   |
| Th-232  | 3.44E-18                                   |
| U-233   | 4.44E-09                                   |
| U-234   | 1.45E-04                                   |
| U-235   | 3.47E-06                                   |
| U-236   | 6.97E-08                                   |
| U-238   | 2.47E-05                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D035, D040, F001, F002, F005

## TRUCON Code(s)

116/216

## Waste Stream Description

N/A

Waste Stream ID: **WP-NTLBL-S5400**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                  |                       |                 |                   |                                       |          |    |
|-------------|------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Nevada Test Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | N/A              | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A              |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |            |
|------------------------------|-------------------|------------|
| Container Type               | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner  | NTLBL-S5400-S     | 1.2        |
| 55-gal Drum Dir Ld w/o Liner | NTLBL-S5400-S     | 0.4        |
| <b>Emplaced Total</b>        |                   | <b>1.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 68.85                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 19.04                                |
| Other Inorganic Materials       | 35.81                                |
| Cellulosics                     | 8.37                                 |
| Rubber                          | 4.61                                 |
| Plastics                        | 18.87                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.74                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 27.75                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.29E-01                                   |
| Am-243  | 3.49E-03                                   |
| Cm-244  | 5.60E-01                                   |
| Cs-137  | 3.18E-05                                   |
| Np-237  | 4.06E-04                                   |
| Pu-238  | 8.86E-02                                   |
| Pu-239  | 4.04E-01                                   |
| Pu-240  | 9.15E-02                                   |
| Pu-241  | 2.12E+00                                   |
| Pu-242  | 1.27E-05                                   |
| Sr-90   | 3.18E-05                                   |
| Th-229  | 8.30E-14                                   |
| Th-230  | 1.14E-12                                   |
| Th-232  | 6.70E-20                                   |
| U-233   | 1.77E-09                                   |
| U-234   | 2.52E-07                                   |
| U-235   | 3.99E-10                                   |
| U-236   | 2.71E-09                                   |
| U-238   | 1.92E-15                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, F001, F002, F003, F005

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **WP-NTLRC-S5400**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                  |                                       |                 |                   |            |          |    |
|-------------|------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Nevada Test Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | N/A              | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A              | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |            |
|-----------------------------|-------------------|------------|
| Container Type              | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner | NTLRC-S5400-S     | 3.1        |
| <b>Emplaced Total</b>       |                   | <b>3.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 48.02                                |
| Aluminum-based Metals/Alloys    | 10.80                                |
| Other Metals                    | 9.85                                 |
| Other Inorganic Materials       | 18.63                                |
| Cellulosics                     | 26.85                                |
| Rubber                          | 31.38                                |
| Plastics                        | 73.04                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 9.45                                 |
| Organic Matrix                  | 0.57                                 |
| Soils/gravel                    | 0.17                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.52E+00                                   |
| Am-243  | 1.13E-05                                   |
| Cs-137  | 3.68E-07                                   |
| Np-237  | 7.83E-05                                   |
| Pu-238  | 1.86E-01                                   |
| Pu-239  | 2.31E+00                                   |
| Pu-240  | 8.47E-01                                   |
| Pu-241  | 1.12E+01                                   |
| Pu-242  | 9.39E-05                                   |
| Sr-90   | 3.67E-07                                   |
| Th-229  | 1.59E-14                                   |
| Th-230  | 1.28E-08                                   |
| Th-232  | 6.20E-19                                   |
| U-233   | 3.40E-10                                   |
| U-234   | 1.42E-03                                   |
| U-235   | 4.74E-05                                   |
| U-236   | 2.51E-08                                   |
| U-238   | 3.37E-05                                   |

## Haz. Waste No(s).

D005, D008, D009, D011, D019, D035, D040, F001, F005

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **WP-NT-RF-BERYLLIUM**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                  |                                       |                     |                   |            |          |    |
|-------------|------------------|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Nevada Test Site | Final Waste Form                      | Uncategorized Metal | Waste Matrix Code | S5111      | Handling | CH |
| Source Cat. | N/A              | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A              | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | NT-RF-BERYLLIUM-S | 29.3        |
| <b>Emplaced Total</b>       |                   | <b>29.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 3.88                                 |
| Aluminum-based Metals/Alloys    | 4.01                                 |
| Other Metals                    | 158.30                               |
| Other Inorganic Materials       | 1.17                                 |
| Cellulosics                     | 8.92                                 |
| Rubber                          | 0.09                                 |
| Plastics                        | 15.77                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.29E-01                                   |
| Am-243  | 3.13E-08                                   |
| Np-237  | 1.35E-06                                   |
| Pu-238  | 3.26E-02                                   |
| Pu-239  | 8.28E-01                                   |
| Pu-240  | 1.88E-01                                   |
| Pu-241  | 1.54E+00                                   |
| Pu-242  | 1.47E-05                                   |
| Th-229  | 1.90E-08                                   |
| Th-230  | 2.77E-10                                   |
| Th-232  | 1.38E-19                                   |
| U-233   | 2.03E-04                                   |
| U-234   | 3.08E-05                                   |
| U-235   | 6.11E-07                                   |
| U-236   | 5.57E-09                                   |
| U-238   | 7.89E-06                                   |

## Haz. Waste No(s).

D007, F002

## TRUCON Code(s)

125/225, 133/233

## Waste Stream Description

N/A

Waste Stream ID: **WP-NT-RF-GRAPHITE**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                  |                       |                 |                   |                                       |          |    |
|-------------|------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Nevada Test Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5126                                 | Handling | CH |
| Source Cat. | N/A              | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A              |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |            |
|-----------------------------|-------------------|------------|
| Container Type              | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner | NT-RF-GRAPHITE-S  | 3.7        |
| <b>Emplaced Total</b>       |                   | <b>3.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.32                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 291.08                               |
| Cellulosics                     | 2.30                                 |
| Rubber                          | 0.61                                 |
| Plastics                        | 12.55                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.72E-01                                   |
| Np-237  | 8.36E-06                                   |
| Pu-238  | 3.22E-01                                   |
| Pu-239  | 1.04E+01                                   |
| Pu-240  | 1.92E+00                                   |
| Pu-241  | 1.81E+01                                   |
| Pu-242  | 1.40E-04                                   |
| Th-229  | 1.67E-15                                   |
| Th-230  | 1.41E-10                                   |
| Th-232  | 1.41E-18                                   |
| U-233   | 3.58E-11                                   |
| U-234   | 1.61E-05                                   |
| U-235   | 1.02E-08                                   |
| U-236   | 5.71E-08                                   |
| U-238   | 7.58E-06                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

115/215, 125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-NT-RF-METAL**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                  |                       |                     |                   |                                       |          |    |
|-------------|------------------|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Nevada Test Site | Final Waste Form      | Uncategorized Metal | Waste Matrix Code | S5111                                 | Handling | CH |
| Source Cat. | N/A              | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A              |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |            |
|------------------------------|-------------------|------------|
| Container Type               | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner  | NT-RF-METAL-S     | 5.6        |
| 55-gal Drum Dir Ld w/o Liner | NT-RF-METAL-S     | 0.4        |
| <b>Emplaced Total</b>        |                   | <b>6.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 166.64                               |
| Aluminum-based Metals/Alloys    | 25.59                                |
| Other Metals                    | 4.59                                 |
| Other Inorganic Materials       | 0.24                                 |
| Cellulosics                     | 7.26                                 |
| Rubber                          | 0.65                                 |
| Plastics                        | 21.28                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 34.45                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.12E-01                                   |
| Am-243  | 4.51E-07                                   |
| Np-237  | 1.86E-06                                   |
| Pu-238  | 3.56E-02                                   |
| Pu-239  | 1.12E+00                                   |
| Pu-240  | 2.77E-01                                   |
| Pu-241  | 2.65E+00                                   |
| Pu-242  | 2.24E-05                                   |
| Th-229  | 3.76E-16                                   |
| Th-230  | 6.65E-08                                   |
| Th-232  | 2.03E-19                                   |
| U-233   | 8.05E-12                                   |
| U-234   | 7.39E-03                                   |
| U-235   | 4.54E-06                                   |
| U-236   | 8.21E-09                                   |
| U-238   | 3.70E-03                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

117/217, 125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-NTS54332R0**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                  |                                       |                 |                   |            |          |    |
|-------------|------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Nevada Test Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | N/A              | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A              | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                  |                   |              |
|-----------------------------------|-------------------|--------------|
| Container Type                    | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner       | NTS54332R0-S      | 235.0        |
| 55-gal Drum Dir Ld w/o Liner      | NTS54332R0-S      | 47.6         |
| SWB w/ 4 - 55-gal Drums w/ Liners | NTS54332R0-S      | 24.6         |
| <b>Emplaced Total</b>             |                   | <b>307.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 45.13                                |
| Aluminum-based Metals/Alloys    | 2.90                                 |
| Other Metals                    | 3.84                                 |
| Other Inorganic Materials       | 6.28                                 |
| Cellulosics                     | 13.22                                |
| Rubber                          | 11.05                                |
| Plastics                        | 46.10                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 10.47                                |
| Organic Matrix                  | 3.40                                 |
| Soils/gravel                    | 0.08                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 137.22                               |
| Packaging Material, Plastic     | 29.61                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.89E-01                                   |
| Am-243  | 4.23E-05                                   |
| Cm-244  | 9.95E-03                                   |
| Cs-137  | 7.92E-07                                   |
| Np-237  | 4.64E-05                                   |
| Pu-238  | 8.22E-02                                   |
| Pu-239  | 1.20E+00                                   |
| Pu-240  | 3.14E-01                                   |
| Pu-241  | 3.62E+00                                   |
| Pu-242  | 3.38E-05                                   |
| Sr-90   | 8.08E-07                                   |
| Th-229  | 1.33E-07                                   |
| Th-230  | 1.63E-09                                   |
| Th-232  | 9.21E-19                                   |
| U-233   | 7.08E-04                                   |
| U-234   | 9.08E-05                                   |
| U-235   | 3.25E-03                                   |
| U-236   | 1.86E-08                                   |
| U-238   | 3.29E-05                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D040, F001, F002, F003, F004, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-NTS54COMRO**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                  |                       |                 |                   |                                       |          |    |
|-------------|------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Nevada Test Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | N/A              | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A              |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                  |                   |             |
|-----------------------------------|-------------------|-------------|
| Container Type                    | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner       | NTS54COMRO-S      | 39.5        |
| 55-gal Drum Dir Ld w/o Liner      | NTS54COMRO-S      | 8.9         |
| SWB w/ 4 - 55-gal Drums w/ Liners | NTS54COMRO-S      | 1.9         |
| <b>Emplaced Total</b>             |                   | <b>50.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 50.86                                |
| Aluminum-based Metals/Alloys    | 4.45                                 |
| Other Metals                    | 5.66                                 |
| Other Inorganic Materials       | 8.36                                 |
| Cellulosics                     | 20.52                                |
| Rubber                          | 12.84                                |
| Plastics                        | 55.40                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 3.71                                 |
| Organic Matrix                  | 0.66                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 133.81                               |
| Packaging Material, Plastic     | 29.65                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.77E-01                                   |
| Am-243  | 4.16E-04                                   |
| Cm-244  | 5.10E-01                                   |
| Cs-137  | 1.68E-06                                   |
| Np-237  | 9.65E-05                                   |
| Pu-238  | 4.28E-01                                   |
| Pu-239  | 1.02E+00                                   |
| Pu-240  | 2.42E-01                                   |
| Pu-241  | 2.50E+00                                   |
| Pu-242  | 3.66E-05                                   |
| Sr-90   | 1.68E-06                                   |
| Th-229  | 9.73E-07                                   |
| Th-230  | 7.46E-10                                   |
| Th-232  | 7.10E-19                                   |
| U-233   | 5.19E-03                                   |
| U-234   | 4.27E-05                                   |
| U-235   | 2.62E-07                                   |
| U-236   | 1.44E-08                                   |
| U-238   | 1.75E-05                                   |

## Haz. Waste No(s).

D004, D005, D006,  
D007, D008, D009,  
D010, D011, D019,  
D022, D027, D028,  
D029, D040, F001,  
F002, F003, F004,  
F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A



Waste Stream ID: **WP-NTS54MIX1R0**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                  |                       |                 |                   |                                       |          |    |
|-------------|------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Nevada Test Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5400                                 | Handling | CH |
| Source Cat. | N/A              | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A              |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |            |
|-----------------------------|-------------------|------------|
| Container Type              | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner | NTS54MIX1R0-S     | 0.4        |
| <b>Emplaced Total</b>       |                   | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 33.89                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 2.40                                 |
| Cellulosics                     | 38.46                                |
| Rubber                          | 41.59                                |
| Plastics                        | 38.46                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.14E-03                                   |
| Am-243  | 2.30E-04                                   |
| Cs-137  | 1.81E-04                                   |
| Np-237  | 1.90E-06                                   |
| Pu-238  | 9.76E-04                                   |
| Pu-239  | 6.96E-02                                   |
| Pu-240  | 1.67E-02                                   |
| Pu-241  | 5.70E-02                                   |
| Pu-242  | 1.64E-06                                   |
| Th-229  | 6.03E-15                                   |
| Th-230  | 2.03E-13                                   |
| Th-232  | 1.96E-19                                   |
| U-233   | 3.22E-11                                   |
| U-234   | 1.12E-08                                   |
| U-235   | 2.74E-10                                   |
| U-236   | 1.99E-09                                   |
| U-238   | 9.90E-16                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D040, F001, F002, F003, F004, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF001.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Combustible     | Waste Matrix Code | S5390      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                   |                   |              |
|------------------------------------|-------------------|--------------|
| Container Type                     | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner        | RF001.01-S        | 745.1        |
| 55-gal Drum Dir Ld w/o Liner       | RF001.01-S        | 92.4         |
| SWB Dir Ld w/o Liner               | RF001.01-S        | 100.2        |
| SWB w/ 4 - 55-gal Drums w/ Liners  | RF001.01-S        | 37.8         |
| SWB w/ 4 - 55-gal Drums w/o Liners | RF001.01-S        | 3.8          |
| <b>Emplaced Total</b>              |                   | <b>979.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1.08                                 |
| Aluminum-based Metals/Alloys    | 0.01                                 |
| Other Metals                    | 0.24                                 |
| Other Inorganic Materials       | 2.65                                 |
| Cellulosics                     | 27.92                                |
| Rubber                          | 0.74                                 |
| Plastics                        | 78.05                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.02                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 136.53                               |
| Packaging Material, Plastic     | 28.78                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.51E+00                                   |
| Am-243  | 1.21E-06                                   |
| Np-237  | 5.56E-05                                   |
| Pu-238  | 1.49E-01                                   |
| Pu-239  | 3.44E+00                                   |
| Pu-240  | 7.99E-01                                   |
| Pu-241  | 1.18E+01                                   |
| Pu-242  | 1.20E-04                                   |
| Th-229  | 4.33E-08                                   |
| Th-230  | 1.10E-08                                   |
| Th-232  | 2.11E-17                                   |
| U-233   | 7.70E-05                                   |
| U-234   | 2.06E-04                                   |
| U-235   | 9.78E-06                                   |
| U-236   | 1.42E-07                                   |
| U-238   | 2.26E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

116/216

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF002.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |            |                                       |      |
|-------------|---|-----------------------|---------------------|-------------------|------------|---------------------------------------|------|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Uncategorized Metal | Waste Matrix Code | S5111      | Handling                              | CH   |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006 | Activity Concentrations Decayed to CY | 2006 |
| Stream Name | N/A                                       |                       |                     |                   |            |                                       |      |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                  |                   |               |
|-----------------------------------|-------------------|---------------|
| Container Type                    | Ref. Waste Stream | Volume        |
| 55-gal Drum Dir Ld w/ Liner       | RF002.01-S        | 399.4         |
| 55-gal Drum Dir Ld w/o Liner      | RF002.01-S        | 32.2          |
| 55-gal POC - 12" w/ Liner         | RF002.01-S        | 13.7          |
| SWB Dir Ld w/o Liner              | RF002.01-S        | 984.7         |
| SWB w/ 4 - 55-gal Drums w/ Liners | RF002.01-S        | 17.0          |
| TDOP w/ 1 SWB w/o Liners          | RF002.01-S        | 14.4          |
| <b>Emplaced Total</b>             |                   | <b>1461.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 230.79                               |
| Aluminum-based Metals/Alloys    | 1.27                                 |
| Other Metals                    | 10.50                                |
| Other Inorganic Materials       | 0.49                                 |
| Cellulosics                     | 7.19                                 |
| Rubber                          | 0.20                                 |
| Plastics                        | 4.84                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.01                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 151.65                               |
| Packaging Material, Plastic     | 10.65                                |
| Packaging Material, Cellulosics | 1.29                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.49E-01                                   |
| Am-243  | 7.24E-07                                   |
| Cs-137  | 2.18E-07                                   |
| Np-237  | 7.96E-06                                   |
| Pu-238  | 1.48E-01                                   |
| Pu-239  | 3.02E+00                                   |
| Pu-240  | 7.10E-01                                   |
| Pu-241  | 1.28E+01                                   |
| Pu-242  | 8.39E-05                                   |
| Th-229  | 7.01E-09                                   |
| Th-230  | 4.00E-09                                   |
| Th-232  | 1.30E-17                                   |
| U-233   | 1.50E-05                                   |
| U-234   | 9.01E-05                                   |
| U-235   | 4.80E-06                                   |
| U-236   | 1.05E-07                                   |
| U-238   | 1.94E-04                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

117/217, 131/231

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF003.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5126      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                   |                   |              |
|------------------------------------|-------------------|--------------|
| Container Type                     | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner        | RF003.01-S        | 65.9         |
| 55-gal Drum Dir Ld w/o Liner       | RF003.01-S        | 0.4          |
| 55-gal POC - 12" w/ Liner          | RF003.01-S        | 275.8        |
| SWB w/ 4 - 55-gal Drums w/ Liners  | RF003.01-S        | 9.5          |
| SWB w/ 4 - 55-gal Drums w/o Liners | RF003.01-S        | 3.8          |
| <b>Emplaced Total</b>              |                   | <b>355.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 13.10                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.07                                 |
| Other Inorganic Materials       | 70.17                                |
| Cellulosics                     | 1.84                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 2.72                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.30                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 441.58                               |
| Packaging Material, Plastic     | 36.01                                |
| Packaging Material, Cellulosics | 106.71                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.22E+00                                   |
| Np-237  | 2.40E-05                                   |
| Pu-238  | 1.48E+00                                   |
| Pu-239  | 3.57E+01                                   |
| Pu-240  | 8.63E+00                                   |
| Pu-241  | 1.02E+02                                   |
| Pu-242  | 8.25E-04                                   |
| Th-229  | 1.60E-08                                   |
| Th-230  | 2.99E-09                                   |
| Th-232  | 2.28E-16                                   |
| U-233   | 2.84E-05                                   |
| U-234   | 6.82E-05                                   |
| U-235   | 1.61E-06                                   |
| U-236   | 1.54E-06                                   |
| U-238   | 3.67E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

115/215

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF004.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5122                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                   |                   |              |
|------------------------------------|-------------------|--------------|
| Container Type                     | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner        | RF004.01-S        | 263.3        |
| 55-gal Drum Dir Ld w/o Liner       | RF004.01-S        | 7.9          |
| 55-gal POC - 12" w/ Liner          | RF004.01-S        | 2.3          |
| SWB Dir Ld w/o Liner               | RF004.01-S        | 1.9          |
| SWB w/ 4 - 55-gal Drums w/ Liners  | RF004.01-S        | 5.7          |
| SWB w/ 4 - 55-gal Drums w/o Liners | RF004.01-S        | 1.9          |
| <b>Emplaced Total</b>              |                   | <b>283.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.60                                 |
| Aluminum-based Metals/Alloys    | 0.02                                 |
| Other Metals                    | 0.46                                 |
| Other Inorganic Materials       | 464.77                               |
| Cellulosics                     | 11.91                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 4.75                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.04                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 136.30                               |
| Packaging Material, Plastic     | 35.06                                |
| Packaging Material, Cellulosics | 1.11                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.20E-01                                   |
| Am-243  | 3.12E-09                                   |
| Np-237  | 5.12E-06                                   |
| Pu-238  | 1.15E-01                                   |
| Pu-239  | 2.43E+00                                   |
| Pu-240  | 5.62E-01                                   |
| Pu-241  | 1.11E+01                                   |
| Pu-242  | 6.77E-05                                   |
| Th-229  | 1.44E-14                                   |
| Th-230  | 2.63E-09                                   |
| Th-232  | 6.59E-18                                   |
| U-233   | 7.93E-11                                   |
| U-234   | 7.37E-05                                   |
| U-235   | 2.34E-06                                   |
| U-236   | 6.67E-08                                   |
| U-238   | 2.66E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

118/218

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF005.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Salt Waste      | Waste Matrix Code | S3141      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes          |                   |              |
|---------------------------|-------------------|--------------|
| Container Type            | Ref. Waste Stream | Volume       |
| 55-gal POC - 12" w/ Liner | RF005.01-S        | 119.4        |
| <b>Emplaced Total</b>     |                   | <b>119.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 19.04                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 3.07                                 |
| Other Inorganic Materials       | 19.27                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.73                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 527.40                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 137.50                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.43E+01                                   |
| Np-237  | 1.36E-04                                   |
| Pu-238  | 1.73E+00                                   |
| Pu-239  | 4.01E+01                                   |
| Pu-240  | 1.03E+01                                   |
| Pu-241  | 6.77E+01                                   |
| Pu-242  | 8.47E-04                                   |
| Th-229  | 7.75E-13                                   |
| Th-230  | 1.47E-09                                   |
| Th-232  | 4.83E-16                                   |
| U-233   | 2.72E-09                                   |
| U-234   | 4.05E-05                                   |
| U-235   | 9.97E-07                                   |
| U-236   | 2.44E-06                                   |
| U-238   | 1.02E-12                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

124/224

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF005.02**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Salt Waste      | Waste Matrix Code | S3141      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes          |                   |             |
|---------------------------|-------------------|-------------|
| Container Type            | Ref. Waste Stream | Volume      |
| 55-gal POC - 12" w/ Liner | RF005.02-S        | 78.4        |
| <b>Emplaced Total</b>     |                   | <b>78.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 13.92                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.23                                 |
| Other Inorganic Materials       | 27.49                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 527.40                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 137.50                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.23E+01                                   |
| Np-237  | 2.17E-04                                   |
| Pu-238  | 1.55E+00                                   |
| Pu-239  | 3.70E+01                                   |
| Pu-240  | 9.73E+00                                   |
| Pu-241  | 5.68E+01                                   |
| Pu-242  | 8.23E-04                                   |
| Th-229  | 9.07E-13                                   |
| Th-230  | 1.49E-09                                   |
| Th-232  | 3.49E-16                                   |
| U-233   | 3.70E-09                                   |
| U-234   | 3.94E-05                                   |
| U-235   | 5.02E-07                                   |
| U-236   | 2.02E-06                                   |
| U-238   | 2.19E-09                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

124/224

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF006.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5123                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |              |
|-----------------------------|-------------------|--------------|
| Container Type              | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner | RF006.01-S        | 2.7          |
| 55-gal POC - 12" w/ Liner   | RF006.01-S        | 233.0        |
| <b>Emplaced Total</b>       |                   | <b>235.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 8.48                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.06                                 |
| Other Inorganic Materials       | 32.83                                |
| Cellulosics                     | 0.03                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.67                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 522.85                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 135.92                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.26E+00                                   |
| Np-237  | 4.31E-05                                   |
| Pu-238  | 1.95E+00                                   |
| Pu-239  | 3.91E+01                                   |
| Pu-240  | 9.45E+00                                   |
| Pu-241  | 1.28E+02                                   |
| Pu-242  | 1.26E-03                                   |
| Th-229  | 9.89E-13                                   |
| Th-230  | 7.85E-09                                   |
| Th-232  | 1.36E-15                                   |
| U-233   | 1.76E-09                                   |
| U-234   | 1.03E-04                                   |
| U-235   | 1.35E-06                                   |
| U-236   | 3.93E-06                                   |
| U-238   | 5.89E-09                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

118/218

## Waste Stream Description

N/A



Waste Stream ID: **WP-RF008.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5123                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                  |                   |             |
|-----------------------------------|-------------------|-------------|
| Container Type                    | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner       | RF008.01-S        | 4.4         |
| 55-gal Drum Dir Ld w/o Liner      | RF008.01-S        | 0.2         |
| 55-gal POC - 12" w/ Liner         | RF008.01-S        | 90.7        |
| SWB w/ 4 - 55-gal Drums w/ Liners | RF008.01-S        | 1.9         |
| <b>Emplaced Total</b>             |                   | <b>97.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 5.36                                 |
| Aluminum-based Metals/Alloys    | 0.10                                 |
| Other Metals                    | 1.39                                 |
| Other Inorganic Materials       | 56.30                                |
| Cellulosics                     | 0.36                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.05                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 502.57                               |
| Packaging Material, Plastic     | 36.52                                |
| Packaging Material, Cellulosics | 128.35                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.76E+00                                   |
| Np-237  | 1.57E-04                                   |
| Pu-238  | 2.03E+00                                   |
| Pu-239  | 3.49E+01                                   |
| Pu-240  | 9.58E+00                                   |
| Pu-241  | 1.11E+02                                   |
| Pu-242  | 1.40E-03                                   |
| Th-229  | 1.41E-12                                   |
| Th-230  | 1.49E-09                                   |
| Th-232  | 3.44E-16                                   |
| U-233   | 4.39E-09                                   |
| U-234   | 4.42E-05                                   |
| U-235   | 5.23E-07                                   |
| U-236   | 1.99E-06                                   |
| U-238   | 7.76E-10                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

118/218

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF009.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Salt Waste      | Waste Matrix Code | S3141      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                   |                   |               |
|------------------------------------|-------------------|---------------|
| Container Type                     | Ref. Waste Stream | Volume        |
| 55-gal Drum Dir Ld w/ Liner        | RF009.01-S        | 3.3           |
| 55-gal Drum Dir Ld w/o Liner       | RF009.01-S        | 8.5           |
| 55-gal POC - 12" w/ Liner          | RF009.01-S        | 1311.2        |
| SWB w/ 4 - 55-gal Drums w/o Liners | RF009.01-S        | 3.8           |
| <b>Emplaced Total</b>              |                   | <b>1326.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 10.46                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 4.01                                 |
| Other Inorganic Materials       | 17.82                                |
| Cellulosics                     | 0.04                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.93                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 522.96                               |
| Packaging Material, Plastic     | 36.66                                |
| Packaging Material, Cellulosics | 135.88                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.05E+01                                   |
| Np-237  | 3.62E-04                                   |
| Pu-238  | 1.48E+00                                   |
| Pu-239  | 4.14E+01                                   |
| Pu-240  | 1.03E+01                                   |
| Pu-241  | 7.18E+01                                   |
| Pu-242  | 1.03E-03                                   |
| Th-229  | 2.15E-12                                   |
| Th-230  | 1.09E-09                                   |
| Th-232  | 2.71E-16                                   |
| U-233   | 8.05E-09                                   |
| U-234   | 3.29E-05                                   |
| U-235   | 4.76E-07                                   |
| U-236   | 1.83E-06                                   |
| U-238   | 2.05E-09                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
124/224, 130/230

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF010.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Filter          | Waste Matrix Code | S5410      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                   |                   |              |
|------------------------------------|-------------------|--------------|
| Container Type                     | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner        | RF010.01-S        | 274.6        |
| 55-gal Drum Dir Ld w/o Liner       | RF010.01-S        | 12.9         |
| SWB Dir Ld w/o Liner               | RF010.01-S        | 264.6        |
| SWB w/ 4 - 55-gal Drums w/ Liners  | RF010.01-S        | 62.4         |
| SWB w/ 4 - 55-gal Drums w/o Liners | RF010.01-S        | 15.1         |
| <b>Emplaced Total</b>              |                   | <b>629.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 12.18                                |
| Aluminum-based Metals/Alloys    | 8.77                                 |
| Other Metals                    | 0.98                                 |
| Other Inorganic Materials       | 8.04                                 |
| Cellulosics                     | 36.45                                |
| Rubber                          | 3.69                                 |
| Plastics                        | 9.49                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.29                                 |
| Organic Matrix                  | 0.03                                 |
| Soils/gravel                    | 0.13                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 150.22                               |
| Packaging Material, Plastic     | 17.75                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.24E+00                                   |
| Am-243  | 6.52E-08                                   |
| Np-237  | 1.21E-05                                   |
| Pu-238  | 4.00E-01                                   |
| Pu-239  | 9.94E+00                                   |
| Pu-240  | 2.32E+00                                   |
| Pu-241  | 2.96E+01                                   |
| Pu-242  | 2.53E-04                                   |
| Th-229  | 4.91E-14                                   |
| Th-230  | 8.97E-09                                   |
| Th-232  | 4.25E-17                                   |
| U-233   | 2.22E-10                                   |
| U-234   | 2.02E-04                                   |
| U-235   | 6.38E-06                                   |
| U-236   | 3.44E-07                                   |
| U-238   | 5.68E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

119/219, 130/230

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF011.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5129                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                  |                   |             |
|-----------------------------------|-------------------|-------------|
| Container Type                    | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner       | RF011.01-S        | 49.5        |
| 55-gal Drum Dir Ld w/o Liner      | RF011.01-S        | 1.7         |
| SWB w/ 4 - 55-gal Drums w/ Liners | RF011.01-S        | 28.4        |
| <b>Emplaced Total</b>             |                   | <b>79.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 10.77                                |
| Aluminum-based Metals/Alloys    | 0.01                                 |
| Other Metals                    | 0.04                                 |
| Other Inorganic Materials       | 17.84                                |
| Cellulosics                     | 1.61                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.75                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 159.43                               |
| Packaging Material, Plastic     | 28.85                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.74E+00                                   |
| Np-237  | 6.89E-06                                   |
| Pu-238  | 7.91E-01                                   |
| Pu-239  | 1.87E+01                                   |
| Pu-240  | 4.50E+00                                   |
| Pu-241  | 4.96E+01                                   |
| Pu-242  | 3.85E-04                                   |
| Th-229  | 1.47E-14                                   |
| Th-230  | 4.85E-10                                   |
| Th-232  | 5.27E-17                                   |
| U-233   | 8.79E-11                                   |
| U-234   | 1.80E-05                                   |
| U-235   | 3.61E-07                                   |
| U-236   | 5.33E-07                                   |
| U-238   | 5.29E-08                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

122/222

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF015.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5123                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |            |
|-----------------------------|-------------------|------------|
| Container Type              | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner | RF015.01-S        | 1.7        |
| <b>Emplaced Total</b>       |                   | <b>1.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 19.17                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 5.05                                 |
| Cellulosics                     | 12.98                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.62                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.03E+00                                   |
| Np-237  | 5.03E-05                                   |
| Pu-238  | 5.72E-01                                   |
| Pu-239  | 1.13E+01                                   |
| Pu-240  | 2.63E+00                                   |
| Pu-241  | 5.84E+01                                   |
| Pu-242  | 3.50E-04                                   |
| Th-229  | 1.55E-13                                   |
| Th-230  | 1.19E-10                                   |
| Th-232  | 3.09E-17                                   |
| U-233   | 8.33E-10                                   |
| U-234   | 6.59E-06                                   |
| U-235   | 4.45E-08                                   |
| U-236   | 3.12E-07                                   |
| U-238   | 2.11E-13                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

122/222

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF029.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                   |                   |               |
|------------------------------------|-------------------|---------------|
| Container Type                     | Ref. Waste Stream | Volume        |
| 55-gal Drum Dir Ld w/ Liner        | RF029.01-S        | 13.9          |
| 55-gal Drum Dir Ld w/o Liner       | RF029.01-S        | 2.7           |
| 55-gal POC - 12" w/ Liner          | RF029.01-S        | 3.1           |
| SWB Dir Ld w/o Liner               | RF029.01-S        | 4316.8        |
| SWB w/ 4 - 55-gal Drums w/o Liners | RF029.01-S        | 5.7           |
| TDOP w/ 1 SWB w/o Liners           | RF029.01-S        | 4.8           |
| <b>Emplaced Total</b>              |                   | <b>4347.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 168.14                               |
| Aluminum-based Metals/Alloys    | 1.51                                 |
| Other Metals                    | 0.58                                 |
| Other Inorganic Materials       | 13.97                                |
| Cellulosics                     | 17.24                                |
| Rubber                          | 1.33                                 |
| Plastics                        | 30.02                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.01                                 |
| Organic Matrix                  | 0.03                                 |
| Soils/gravel                    | 0.16                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.83                               |
| Packaging Material, Plastic     | 0.15                                 |
| Packaging Material, Cellulosics | 0.10                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.72E-01                                   |
| Am-243  | 3.33E-07                                   |
| Cs-137  | 6.15E-09                                   |
| Np-237  | 5.57E-06                                   |
| Pu-238  | 8.51E-02                                   |
| Pu-239  | 1.58E+00                                   |
| Pu-240  | 3.80E-01                                   |
| Pu-241  | 8.89E+00                                   |
| Pu-242  | 5.09E-05                                   |
| Pu-244  | 2.38E-21                                   |
| Sr-90   | 4.20E-11                                   |
| Th-229  | 9.71E-15                                   |
| Th-230  | 5.15E-10                                   |
| Th-232  | 2.50E-18                                   |
| U-233   | 7.00E-11                                   |
| U-234   | 1.94E-05                                   |
| U-235   | 6.10E-07                                   |
| U-236   | 3.38E-08                                   |
| U-238   | 2.89E-07                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

121/221, 130/230

## Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **WP-RF031.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5313      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | RF031.01-S        | 15.2        |
| 55-gal Drum Dir Ld w/o Liner | RF031.01-S        | 5.0         |
| 55-gal POC - 12" w/ Liner    | RF031.01-S        | 0.4         |
| <b>Emplaced Total</b>        |                   | <b>20.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.34                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.23                                 |
| Other Inorganic Materials       | 1.10                                 |
| Cellulosics                     | 9.68                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 46.42                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 6.07                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 138.81                               |
| Packaging Material, Plastic     | 28.03                                |
| Packaging Material, Cellulosics | 2.78                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.24E-01                                   |
| Np-237  | 2.43E-06                                   |
| Pu-238  | 1.13E-01                                   |
| Pu-239  | 2.34E+00                                   |
| Pu-240  | 5.42E-01                                   |
| Pu-241  | 1.17E+01                                   |
| Pu-242  | 6.42E-05                                   |
| Th-229  | 1.85E-15                                   |
| Th-230  | 7.87E-10                                   |
| Th-232  | 1.59E-18                                   |
| U-233   | 2.01E-11                                   |
| U-234   | 4.41E-05                                   |
| U-235   | 1.42E-06                                   |
| U-236   | 3.21E-08                                   |
| U-238   | 1.99E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

121/221, 130/230

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF032.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5129                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |              |
|-----------------------------|-------------------|--------------|
| Container Type              | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner | RF032.01-S        | 3.1          |
| 55-gal POC - 12" w/ Liner   | RF032.01-S        | 206.1        |
| <b>Emplaced Total</b>       |                   | <b>209.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 15.54                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.23                                 |
| Other Inorganic Materials       | 31.96                                |
| Cellulosics                     | 0.04                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.06                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 521.49                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 135.45                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.09E+01                                   |
| Np-237  | 1.18E-04                                   |
| Pu-238  | 1.50E+00                                   |
| Pu-239  | 4.12E+01                                   |
| Pu-240  | 9.67E+00                                   |
| Pu-241  | 9.07E+01                                   |
| Pu-242  | 7.24E-04                                   |
| Th-229  | 5.32E-13                                   |
| Th-230  | 8.70E-10                                   |
| Th-232  | 1.77E-16                                   |
| U-233   | 2.33E-09                                   |
| U-234   | 3.01E-05                                   |
| U-235   | 4.75E-07                                   |
| U-236   | 1.43E-06                                   |
| U-238   | 2.41E-09                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

122/222

## Waste Stream Description

N/A



Waste Stream ID: **WP-RF033.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3119                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | RF033.01-S        | 12.1        |
| 55-gal Drum Dir Ld w/o Liner | RF033.01-S        | 1.7         |
| 55-gal POC - 12" w/ Liner    | RF033.01-S        | 11.9        |
| <b>Emplaced Total</b>        |                   | <b>25.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 16.37                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 1.27                                 |
| Other Inorganic Materials       | 109.77                               |
| Cellulosics                     | 0.20                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 27.33                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.09                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 314.59                               |
| Packaging Material, Plastic     | 34.59                                |
| Packaging Material, Cellulosics | 63.72                                |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.33E+00                                   |
| Np-237  | 3.00E-05                                   |
| Pu-238  | 1.36E+00                                   |
| Pu-239  | 3.12E+01                                   |
| Pu-240  | 7.29E+00                                   |
| Pu-241  | 1.15E+02                                   |
| Pu-242  | 7.19E-04                                   |
| Th-229  | 8.42E-14                                   |
| Th-230  | 7.23E-10                                   |
| Th-232  | 8.54E-17                                   |
| U-233   | 4.64E-10                                   |
| U-234   | 2.79E-05                                   |
| U-235   | 5.38E-07                                   |
| U-236   | 8.65E-07                                   |
| U-238   | 2.34E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

130/230

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF036.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5420                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | RF036.01-S        | 44.1        |
| <b>Emplaced Total</b>       |                   | <b>44.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1.12                                 |
| Aluminum-based Metals/Alloys    | 0.79                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 488.73                               |
| Cellulosics                     | 7.07                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 12.67                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.29                                 |
| Soils/gravel                    | 4.40                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.60E-01                                   |
| Am-243  | 1.85E-06                                   |
| Np-237  | 7.94E-06                                   |
| Pu-238  | 3.08E-01                                   |
| Pu-239  | 6.00E+00                                   |
| Pu-240  | 1.40E+00                                   |
| Pu-241  | 3.42E+01                                   |
| Pu-242  | 1.85E-04                                   |
| Th-229  | 6.16E-15                                   |
| Th-230  | 1.02E-09                                   |
| Th-232  | 4.10E-18                                   |
| U-233   | 6.66E-11                                   |
| U-234   | 5.75E-05                                   |
| U-235   | 2.51E-06                                   |
| U-236   | 8.31E-08                                   |
| U-238   | 6.76E-05                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF101.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Combustible     | Waste Matrix Code | S5390                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                  |                   |              |
|-----------------------------------|-------------------|--------------|
| Container Type                    | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner       | RF101.01-S        | 114.6        |
| 55-gal Drum Dir Ld w/o Liner      | RF101.01-S        | 13.1         |
| SWB Dir Ld w/o Liner              | RF101.01-S        | 24.6         |
| SWB w/ 4 - 55-gal Drums w/ Liners | RF101.01-S        | 22.7         |
| <b>Emplaced Total</b>             |                   | <b>175.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 2.53                                 |
| Aluminum-based Metals/Alloys    | 0.02                                 |
| Other Metals                    | 0.39                                 |
| Other Inorganic Materials       | 15.34                                |
| Cellulosics                     | 62.57                                |
| Rubber                          | 1.27                                 |
| Plastics                        | 30.20                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.84                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 144.40                               |
| Packaging Material, Plastic     | 26.35                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.92E+00                                   |
| Am-243  | 6.04E-06                                   |
| Np-237  | 1.28E-05                                   |
| Pu-238  | 4.64E-01                                   |
| Pu-239  | 9.65E+00                                   |
| Pu-240  | 2.26E+00                                   |
| Pu-241  | 4.07E+01                                   |
| Pu-242  | 2.64E-04                                   |
| Th-229  | 3.58E-14                                   |
| Th-230  | 8.65E-09                                   |
| Th-232  | 2.65E-17                                   |
| U-233   | 1.97E-10                                   |
| U-234   | 2.43E-04                                   |
| U-235   | 7.75E-06                                   |
| U-236   | 2.68E-07                                   |
| U-238   | 4.88E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D043, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

## TRUCON Code(s)

116/216

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF101.29**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Combustible     | Waste Matrix Code | S5390      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | RF101.29-S        | 25.4        |
| 55-gal Drum Dir Ld w/o Liner | RF101.29-S        | 3.1         |
| SWB Dir Ld w/o Liner         | RF101.29-S        | 1.9         |
| <b>Emplaced Total</b>        |                   | <b>30.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1.43                                 |
| Aluminum-based Metals/Alloys    | 0.03                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 12.48                                |
| Cellulosics                     | 51.65                                |
| Rubber                          | 5.43                                 |
| Plastics                        | 47.43                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 132.21                               |
| Packaging Material, Plastic     | 30.90                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.98E-01                                   |
| Np-237  | 6.11E-06                                   |
| Pu-238  | 2.54E-01                                   |
| Pu-239  | 5.15E+00                                   |
| Pu-240  | 1.20E+00                                   |
| Pu-241  | 2.03E+01                                   |
| Pu-242  | 1.39E-04                                   |
| Th-229  | 2.55E-14                                   |
| Th-230  | 8.24E-09                                   |
| Th-232  | 2.19E-17                                   |
| U-233   | 1.14E-10                                   |
| U-234   | 1.85E-04                                   |
| U-235   | 5.93E-06                                   |
| U-236   | 1.78E-07                                   |
| U-238   | 6.71E-06                                   |

## Haz. Waste No(s).

F001

## TRUCON Code(s)

116/216

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF101.30**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Combustible     | Waste Matrix Code | S5390      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                   |                   |              |
|------------------------------------|-------------------|--------------|
| Container Type                     | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner        | RF101.30-S        | 79.5         |
| 55-gal Drum Dir Ld w/o Liner       | RF101.30-S        | 5.8          |
| SWB Dir Ld w/o Liner               | RF101.30-S        | 3.8          |
| SWB w/ 4 - 55-gal Drums w/ Liners  | RF101.30-S        | 24.6         |
| SWB w/ 4 - 55-gal Drums w/o Liners | RF101.30-S        | 3.8          |
| <b>Emplaced Total</b>              |                   | <b>117.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.84                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.09                                 |
| Other Inorganic Materials       | 2.31                                 |
| Cellulosics                     | 40.50                                |
| Rubber                          | 0.80                                 |
| Plastics                        | 37.94                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.04                                 |
| Organic Matrix                  | 0.03                                 |
| Soils/gravel                    | 0.01                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 150.92                               |
| Packaging Material, Plastic     | 28.45                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.06E+00                                   |
| Am-243  | 2.67E-06                                   |
| Np-237  | 2.18E-05                                   |
| Pu-238  | 3.31E-01                                   |
| Pu-239  | 7.49E+00                                   |
| Pu-240  | 1.76E+00                                   |
| Pu-241  | 2.64E+01                                   |
| Pu-242  | 2.16E-04                                   |
| Th-229  | 9.28E-14                                   |
| Th-230  | 6.40E-09                                   |
| Th-232  | 3.22E-17                                   |
| U-233   | 4.13E-10                                   |
| U-234   | 1.45E-04                                   |
| U-235   | 4.55E-06                                   |
| U-236   | 2.61E-07                                   |
| U-238   | 1.57E-06                                   |

## Haz. Waste No(s).

F001, F002

## TRUCON Code(s)

116/216, 119/219

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF101.31**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Combustible     | Waste Matrix Code | S5390                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                  |                   |             |
|-----------------------------------|-------------------|-------------|
| Container Type                    | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner       | RF101.31-S        | 43.9        |
| 55-gal Drum Dir Ld w/o Liner      | RF101.31-S        | 5.4         |
| SWB Dir Ld w/o Liner              | RF101.31-S        | 9.5         |
| SWB w/ 4 - 55-gal Drums w/ Liners | RF101.31-S        | 3.8         |
| <b>Emplaced Total</b>             |                   | <b>62.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 4.86                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.12                                 |
| Other Inorganic Materials       | 2.09                                 |
| Cellulosics                     | 65.86                                |
| Rubber                          | 0.69                                 |
| Plastics                        | 43.00                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.02                                 |
| Organic Matrix                  | 0.02                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 139.09                               |
| Packaging Material, Plastic     | 26.96                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.09E+00                                   |
| Am-243  | 2.18E-07                                   |
| Np-237  | 5.34E-06                                   |
| Pu-238  | 1.69E-01                                   |
| Pu-239  | 3.74E+00                                   |
| Pu-240  | 8.88E-01                                   |
| Pu-241  | 1.26E+01                                   |
| Pu-242  | 1.32E-04                                   |
| Th-229  | 2.88E-14                                   |
| Th-230  | 4.94E-09                                   |
| Th-232  | 2.34E-17                                   |
| U-233   | 1.11E-10                                   |
| U-234   | 9.30E-05                                   |
| U-235   | 2.94E-06                                   |
| U-236   | 1.58E-07                                   |
| U-238   | 1.33E-06                                   |

## Haz. Waste No(s).

F001, F002, F005

## TRUCON Code(s)

116/216

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF101.35**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Combustible     | Waste Matrix Code | S5390      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                  |                   |             |
|-----------------------------------|-------------------|-------------|
| Container Type                    | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner       | RF101.35-S        | 51.2        |
| 55-gal Drum Dir Ld w/o Liner      | RF101.35-S        | 17.1        |
| SWB Dir Ld w/o Liner              | RF101.35-S        | 3.8         |
| SWB w/ 4 - 55-gal Drums w/ Liners | RF101.35-S        | 7.6         |
| <b>Emplaced Total</b>             |                   | <b>79.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.72                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.57                                 |
| Other Inorganic Materials       | 2.66                                 |
| Cellulosics                     | 48.15                                |
| Rubber                          | 0.47                                 |
| Plastics                        | 58.97                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 139.51                               |
| Packaging Material, Plastic     | 25.34                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.97E+00                                   |
| Np-237  | 2.53E-05                                   |
| Pu-238  | 3.75E-01                                   |
| Pu-239  | 8.02E+00                                   |
| Pu-240  | 1.87E+00                                   |
| Pu-241  | 3.27E+01                                   |
| Pu-242  | 2.62E-04                                   |
| Th-229  | 1.11E-13                                   |
| Th-230  | 4.79E-08                                   |
| Th-232  | 3.43E-17                                   |
| U-233   | 4.91E-10                                   |
| U-234   | 1.07E-03                                   |
| U-235   | 3.42E-05                                   |
| U-236   | 2.78E-07                                   |
| U-238   | 2.75E-06                                   |

## Haz. Waste No(s).

F005

## TRUCON Code(s)

116/216

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF102.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5119      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                  |                   |              |
|-----------------------------------|-------------------|--------------|
| Container Type                    | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner       | RF102.01-S        | 45.3         |
| 55-gal Drum Dir Ld w/o Liner      | RF102.01-S        | 0.6          |
| SWB Dir Ld w/o Liner              | RF102.01-S        | 175.8        |
| SWB w/ 4 - 55-gal Drums w/ Liners | RF102.01-S        | 1.9          |
| <b>Emplaced Total</b>             |                   | <b>223.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 234.12                               |
| Aluminum-based Metals/Alloys    | 0.50                                 |
| Other Metals                    | 9.83                                 |
| Other Inorganic Materials       | 1.88                                 |
| Cellulosics                     | 6.47                                 |
| Rubber                          | 0.25                                 |
| Plastics                        | 4.10                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 149.32                               |
| Packaging Material, Plastic     | 7.64                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.53E-01                                   |
| Am-243  | 8.92E-07                                   |
| Cs-137  | 4.50E-05                                   |
| Np-237  | 6.48E-06                                   |
| Pu-238  | 1.33E-01                                   |
| Pu-239  | 2.56E+00                                   |
| Pu-240  | 6.11E-01                                   |
| Pu-241  | 1.32E+01                                   |
| Pu-242  | 7.93E-05                                   |
| Th-229  | 1.89E-14                                   |
| Th-230  | 6.89E-10                                   |
| Th-232  | 7.16E-18                                   |
| U-233   | 1.03E-10                                   |
| U-234   | 1.99E-05                                   |
| U-235   | 6.19E-07                                   |
| U-236   | 7.24E-08                                   |
| U-238   | 1.78E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D029, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

## TRUCON Code(s)

117/217

## Waste Stream Description

N/A



Waste Stream ID: **WP-RF102.31**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                          |                   |            |          |    |
|-------------|---|---------------------------------------|--------------------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Lead/Cadmium Metal Waste | Waste Matrix Code | S5112      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related          | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                          |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                  |                   |              |
|-----------------------------------|-------------------|--------------|
| Container Type                    | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner       | RF102.31-S        | 22.3         |
| 55-gal Drum Dir Ld w/o Liner      | RF102.31-S        | 1.0          |
| 55-gal POC - 12" w/ Liner         | RF102.31-S        | 0.6          |
| SWB Dir Ld w/o Liner              | RF102.31-S        | 96.4         |
| SWB w/ 4 - 55-gal Drums w/ Liners | RF102.31-S        | 3.8          |
| <b>Emplaced Total</b>             |                   | <b>124.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 189.33                               |
| Aluminum-based Metals/Alloys    | 0.36                                 |
| Other Metals                    | 147.87                               |
| Other Inorganic Materials       | 0.16                                 |
| Cellulosics                     | 5.66                                 |
| Rubber                          | 1.89                                 |
| Plastics                        | 3.08                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 152.87                               |
| Packaging Material, Plastic     | 7.32                                 |
| Packaging Material, Cellulosics | 0.69                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.12E+00                                   |
| Am-243  | 1.55E-07                                   |
| Np-237  | 8.47E-06                                   |
| Pu-238  | 1.11E-01                                   |
| Pu-239  | 2.21E+00                                   |
| Pu-240  | 5.24E-01                                   |
| Pu-241  | 1.06E+01                                   |
| Pu-242  | 6.82E-05                                   |
| Th-229  | 2.40E-14                                   |
| Th-230  | 2.32E-09                                   |
| Th-232  | 6.14E-18                                   |
| U-233   | 1.32E-10                                   |
| U-234   | 6.51E-05                                   |
| U-235   | 2.23E-06                                   |
| U-236   | 6.21E-08                                   |
| U-238   | 1.72E-05                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

117/217

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF104.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                     |                   |            |          |    |
|-------------|---|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Inorganic Non-Metal | Waste Matrix Code | S5122      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                   |                   |             |
|------------------------------------|-------------------|-------------|
| Container Type                     | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner        | RF104.01-S        | 35.2        |
| 55-gal Drum Dir Ld w/o Liner       | RF104.01-S        | 2.1         |
| 55-gal POC - 12" w/ Liner          | RF104.01-S        | 7.7         |
| SWB Dir Ld w/o Liner               | RF104.01-S        | 5.7         |
| SWB w/ 4 - 55-gal Drums w/ Liners  | RF104.01-S        | 1.9         |
| SWB w/ 4 - 55-gal Drums w/o Liners | RF104.01-S        | 1.9         |
| <b>Emplaced Total</b>              |                   | <b>54.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 5.65                                 |
| Aluminum-based Metals/Alloys    | 0.01                                 |
| Other Metals                    | 1.43                                 |
| Other Inorganic Materials       | 213.89                               |
| Cellulosics                     | 7.04                                 |
| Rubber                          | 0.06                                 |
| Plastics                        | 5.63                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 194.88                               |
| Packaging Material, Plastic     | 29.72                                |
| Packaging Material, Cellulosics | 19.46                                |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.20E+00                                   |
| Am-243  | 4.20E-06                                   |
| Np-237  | 1.80E-05                                   |
| Pu-238  | 2.98E-01                                   |
| Pu-239  | 7.52E+00                                   |
| Pu-240  | 1.77E+00                                   |
| Pu-241  | 2.47E+01                                   |
| Pu-242  | 1.72E-04                                   |
| Th-229  | 3.05E-14                                   |
| Th-230  | 4.52E-10                                   |
| Th-232  | 1.17E-17                                   |
| U-233   | 2.21E-10                                   |
| U-234   | 1.80E-05                                   |
| U-235   | 5.44E-07                                   |
| U-236   | 1.58E-07                                   |
| U-238   | 2.58E-06                                   |

## Haz. Waste No(s).

D005, D008, D009,  
D022, F001, F002,  
F005

## TRUCON Code(s)

118/218

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF107.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3190                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | RF107.01-S        | 63.4        |
| <b>Emplaced Total</b>       |                   | <b>63.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.17                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.73                                 |
| Other Inorganic Materials       | 13.61                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.11                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 776.54                               |
| Organic Matrix                  | 11.45                                |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.14E+01                                   |
| Np-237  | 2.48E-04                                   |
| Pu-238  | 1.50E-01                                   |
| Pu-239  | 3.01E+00                                   |
| Pu-240  | 6.97E-01                                   |
| Pu-241  | 1.68E+01                                   |
| Pu-242  | 9.12E-05                                   |
| Th-229  | 1.88E-13                                   |
| Th-230  | 4.88E-09                                   |
| Th-232  | 2.04E-18                                   |
| U-233   | 2.05E-09                                   |
| U-234   | 2.72E-04                                   |
| U-235   | 1.75E-05                                   |
| U-236   | 4.14E-08                                   |
| U-238   | 9.43E-04                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D011

## TRUCON Code(s)

132/232

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF107.03**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                       |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3190      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | RF107.03-S        | 60.7        |
| 55-gal Drum Dir Ld w/o Liner | RF107.03-S        | 0.2         |
| <b>Emplaced Total</b>        |                   | <b>60.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.45                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.09                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 819.47                               |
| Organic Matrix                  | 0.04                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 36.87                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.33E-01                                   |
| Np-237  | 1.94E-06                                   |
| Pu-238  | 1.92E-02                                   |
| Pu-239  | 3.80E-01                                   |
| Pu-240  | 8.84E-02                                   |
| Pu-241  | 2.14E+00                                   |
| Pu-242  | 1.16E-05                                   |
| Th-229  | 1.51E-15                                   |
| Th-230  | 2.28E-08                                   |
| Th-232  | 2.59E-19                                   |
| U-233   | 1.63E-11                                   |
| U-234   | 1.27E-03                                   |
| U-235   | 1.50E-04                                   |
| U-236   | 5.24E-09                                   |
| U-238   | 1.13E-02                                   |

## Haz. Waste No(s).

F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

111/211, 127/227

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF107.04**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |            |                                       |      |
|-------------|---|-----------------------|-----------------------|-------------------|------------|---------------------------------------|------|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3190      | Handling                              | CH   |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006 | Activity Concentrations Decayed to CY | 2006 |
| Stream Name | N/A                                       |                       |                       |                   |            |                                       |      |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                  |                   |              |
|-----------------------------------|-------------------|--------------|
| Container Type                    | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner       | RF107.04-S        | 100.9        |
| 55-gal Drum Dir Ld w/o Liner      | RF107.04-S        | 1.9          |
| SWB w/ 4 - 55-gal Drums w/ Liners | RF107.04-S        | 7.6          |
| <b>Emplaced Total</b>             |                   | <b>110.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.01                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.07                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.64                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 954.33                               |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 136.30                               |
| Packaging Material, Plastic     | 34.95                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.25E-01                                   |
| Np-237  | 4.38E-06                                   |
| Pu-238  | 3.77E-02                                   |
| Pu-239  | 7.55E-01                                   |
| Pu-240  | 1.75E-01                                   |
| Pu-241  | 4.22E+00                                   |
| Pu-242  | 2.29E-05                                   |
| Th-229  | 3.40E-15                                   |
| Th-230  | 3.46E-10                                   |
| Th-232  | 5.13E-19                                   |
| U-233   | 3.67E-11                                   |
| U-234   | 1.93E-05                                   |
| U-235   | 1.91E-06                                   |
| U-236   | 1.04E-08                                   |
| U-238   | 1.40E-04                                   |

## Haz. Waste No(s).

D022, D028, D029,  
D030, D032, D034,  
F001, F002, F005

## TRUCON Code(s)

112/212

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF107.05**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3190                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |            |
|-----------------------------|-------------------|------------|
| Container Type              | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner | RF107.05-S        | 4.4        |
| <b>Emplaced Total</b>       |                   | <b>4.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.63                                 |
| Cellulosics                     | 8.65                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 2.35                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 601.28                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.03E+00                                   |
| Np-237  | 5.81E-06                                   |
| Pu-238  | 2.35E-01                                   |
| Pu-239  | 4.67E+00                                   |
| Pu-240  | 1.09E+00                                   |
| Pu-241  | 2.62E+01                                   |
| Pu-242  | 1.42E-04                                   |
| Th-229  | 4.40E-15                                   |
| Th-230  | 4.06E-08                                   |
| Th-232  | 3.18E-18                                   |
| U-233   | 4.78E-11                                   |
| U-234   | 2.26E-03                                   |
| U-235   | 7.28E-05                                   |
| U-236   | 6.44E-08                                   |
| U-238   | 6.43E-07                                   |

## Haz. Waste No(s).

D004, D005, D009, D010, D022, D027, D028, D029, D032, D033, D034, D043, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

## TRUCON Code(s)

127/227

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF107.06**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3190                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | RF107.06-S        | 14.4        |
| <b>Emplaced Total</b>       |                   | <b>14.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.49                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 8.25                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 873.52                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.72E-02                                   |
| Np-237  | 5.20E-08                                   |
| Pu-238  | 1.06E-02                                   |
| Pu-239  | 2.13E-01                                   |
| Pu-240  | 4.94E-02                                   |
| Pu-241  | 1.19E+00                                   |
| Pu-242  | 6.46E-06                                   |
| Th-229  | 3.34E-17                                   |
| Th-230  | 2.89E-09                                   |
| Th-232  | 1.45E-19                                   |
| U-233   | 3.80E-13                                   |
| U-234   | 1.61E-04                                   |
| U-235   | 1.83E-05                                   |
| U-236   | 2.93E-09                                   |
| U-238   | 1.40E-03                                   |

## Haz. Waste No(s).

F001, F002, F005,  
F006, F007, F009,  
P030, P098, P099,  
P106, U003, U103,  
U108

## TRUCON Code(s)

127/227

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF107.07**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                       |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3190      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                  |                   |             |
|-----------------------------------|-------------------|-------------|
| Container Type                    | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner       | RF107.07-S        | 57.0        |
| SWB w/ 4 - 55-gal Drums w/ Liners | RF107.07-S        | 1.9         |
| <b>Emplaced Total</b>             |                   | <b>58.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 3.51                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1172.21                              |
| Organic Matrix                  | 4.62                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 133.38                               |
| Packaging Material, Plastic     | 36.34                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.72E+00                                   |
| Am-243  | 2.88E-05                                   |
| Np-237  | 4.01E-05                                   |
| Pu-238  | 6.29E-01                                   |
| Pu-239  | 1.23E+01                                   |
| Pu-240  | 2.87E+00                                   |
| Pu-241  | 6.98E+01                                   |
| Pu-242  | 3.79E-04                                   |
| Th-229  | 3.11E-14                                   |
| Th-230  | 4.17E-08                                   |
| Th-232  | 8.40E-18                                   |
| U-233   | 3.36E-10                                   |
| U-234   | 2.32E-03                                   |
| U-235   | 7.51E-05                                   |
| U-236   | 1.70E-07                                   |
| U-238   | 3.74E-05                                   |

## Haz. Waste No(s).

F001, F002, F005,  
F006, F007, F009,  
P030, P098, P099,  
P106, U003, U103,  
U108

## TRUCON Code(s)

111/211, 113/213,  
126/226

## Waste Stream Description

N/A



Waste Stream ID: **WP-RF110.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Filter          | Waste Matrix Code | S5410                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |            |
|------------------------------|-------------------|------------|
| Container Type               | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner  | RF110.01-S        | 8.3        |
| 55-gal Drum Dir Ld w/o Liner | RF110.01-S        | 0.6        |
| 55-gal POC - 12" w/ Liner    | RF110.01-S        | 0.2        |
| <b>Emplaced Total</b>        |                   | <b>9.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 4.57                                 |
| Aluminum-based Metals/Alloys    | 5.49                                 |
| Other Metals                    | 0.08                                 |
| Other Inorganic Materials       | 9.72                                 |
| Cellulosics                     | 50.40                                |
| Rubber                          | 4.90                                 |
| Plastics                        | 26.12                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.07                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 139.81                               |
| Packaging Material, Plastic     | 34.48                                |
| Packaging Material, Cellulosics | 3.13                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.06E+00                                   |
| Am-243  | 1.88E-04                                   |
| Np-237  | 2.42E-05                                   |
| Pu-238  | 6.81E-01                                   |
| Pu-239  | 1.37E+01                                   |
| Pu-240  | 3.20E+00                                   |
| Pu-241  | 5.77E+01                                   |
| Pu-242  | 7.16E-04                                   |
| Th-229  | 5.80E-14                                   |
| Th-230  | 3.58E-09                                   |
| Th-232  | 3.75E-17                                   |
| U-233   | 3.34E-10                                   |
| U-234   | 1.03E-04                                   |
| U-235   | 3.32E-06                                   |
| U-236   | 3.79E-07                                   |
| U-238   | 2.12E-05                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D029, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

## TRUCON Code(s)

119/219, 130/230

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF110.05**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Filter          | Waste Matrix Code | S5410      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                   |                   |             |
|------------------------------------|-------------------|-------------|
| Container Type                     | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner        | RF110.05-S        | 16.6        |
| 55-gal Drum Dir Ld w/o Liner       | RF110.05-S        | 1.7         |
| SWB w/ 4 - 55-gal Drums w/ Liners  | RF110.05-S        | 11.3        |
| SWB w/ 4 - 55-gal Drums w/o Liners | RF110.05-S        | 1.9         |
| <b>Emplaced Total</b>              |                   | <b>31.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 7.11                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 7.40                                 |
| Cellulosics                     | 6.35                                 |
| Rubber                          | 0.07                                 |
| Plastics                        | 17.62                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.23                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 164.49                               |
| Packaging Material, Plastic     | 25.39                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.48E+00                                   |
| Np-237  | 6.14E-06                                   |
| Pu-238  | 6.51E-01                                   |
| Pu-239  | 1.46E+01                                   |
| Pu-240  | 3.38E+00                                   |
| Pu-241  | 3.83E+01                                   |
| Pu-242  | 3.25E-04                                   |
| Th-229  | 1.79E-14                                   |
| Th-230  | 7.25E-09                                   |
| Th-232  | 6.19E-17                                   |
| U-233   | 8.99E-11                                   |
| U-234   | 1.66E-04                                   |
| U-235   | 5.12E-06                                   |
| U-236   | 5.01E-07                                   |
| U-238   | 5.28E-07                                   |

## Haz. Waste No(s).

D022, F001, F002

## TRUCON Code(s)

119/219

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF113.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                     |                   |            |          |    |
|-------------|---|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Solidified Organics | Waste Matrix Code | S3114      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |            |
|-----------------------------|-------------------|------------|
| Container Type              | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner | RF113.01-S        | 0.4        |
| <b>Emplaced Total</b>       |                   | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 108.89                               |
| Cellulosics                     | 0.48                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 12.02                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.35E-01                                   |
| Np-237  | 2.36E-06                                   |
| Pu-238  | 4.40E-02                                   |
| Pu-239  | 8.91E-01                                   |
| Pu-240  | 2.07E-01                                   |
| Pu-241  | 4.53E+00                                   |
| Pu-242  | 2.71E-05                                   |
| Th-229  | 7.17E-15                                   |
| Th-230  | 9.17E-12                                   |
| Th-232  | 2.42E-18                                   |
| U-233   | 3.87E-11                                   |
| U-234   | 5.07E-07                                   |
| U-235   | 3.51E-09                                   |
| U-236   | 2.45E-08                                   |
| U-238   | 1.64E-14                                   |

## Haz. Waste No(s).

D007, D010, F005

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF115.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                     |                   |            |          |    |
|-------------|---|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Inorganic Non-Metal | Waste Matrix Code | S5123      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                   |                   |              |
|------------------------------------|-------------------|--------------|
| Container Type                     | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner        | RF115.01-S        | 17.3         |
| 55-gal Drum Dir Ld w/o Liner       | RF115.01-S        | 1.5          |
| 55-gal POC - 12" w/ Liner          | RF115.01-S        | 86.7         |
| SWB w/ 4 - 55-gal Drums w/ Liners  | RF115.01-S        | 5.7          |
| SWB w/ 4 - 55-gal Drums w/o Liners | RF115.01-S        | 3.8          |
| <b>Emplaced Total</b>              |                   | <b>114.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 16.78                                |
| Aluminum-based Metals/Alloys    | 0.01                                 |
| Other Metals                    | 11.65                                |
| Other Inorganic Materials       | 53.37                                |
| Cellulosics                     | 2.41                                 |
| Rubber                          | 0.01                                 |
| Plastics                        | 3.38                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.01                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 436.77                               |
| Packaging Material, Plastic     | 34.29                                |
| Packaging Material, Cellulosics | 103.79                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.09E+00                                   |
| Np-237  | 1.40E-05                                   |
| Pu-238  | 9.12E-01                                   |
| Pu-239  | 2.20E+01                                   |
| Pu-240  | 5.13E+00                                   |
| Pu-241  | 4.56E+01                                   |
| Pu-242  | 4.30E-04                                   |
| Th-229  | 3.35E-14                                   |
| Th-230  | 4.43E-10                                   |
| Th-232  | 6.01E-17                                   |
| U-233   | 1.93E-10                                   |
| U-234   | 1.75E-05                                   |
| U-235   | 3.61E-07                                   |
| U-236   | 6.08E-07                                   |
| U-238   | 5.44E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F005

## TRUCON Code(s)

122/222

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF116.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3119                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes          |                   |            |
|---------------------------|-------------------|------------|
| Container Type            | Ref. Waste Stream | Volume     |
| 55-gal POC - 12" w/ Liner | RF116.01-S        | 4.0        |
| <b>Emplaced Total</b>     |                   | <b>4.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 19.23                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 16.09                                |
| Other Inorganic Materials       | 32.79                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 3.23                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 527.40                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 137.50                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.40E+00                                   |
| Np-237  | 3.44E-05                                   |
| Pu-238  | 6.49E-01                                   |
| Pu-239  | 2.48E+01                                   |
| Pu-240  | 5.75E+00                                   |
| Pu-241  | 3.32E+01                                   |
| Pu-242  | 3.84E-04                                   |
| Th-229  | 9.48E-14                                   |
| Th-230  | 1.35E-10                                   |
| Th-232  | 6.74E-17                                   |
| U-233   | 5.25E-10                                   |
| U-234   | 7.49E-06                                   |
| U-235   | 9.78E-08                                   |
| U-236   | 6.82E-07                                   |
| U-238   | 2.32E-13                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F005

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF117.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5123                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |            |
|------------------------------|-------------------|------------|
| Container Type               | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner  | RF117.01-S        | 1.7        |
| 55-gal Drum Dir Ld w/o Liner | RF117.01-S        | 0.2        |
| <b>Emplaced Total</b>        |                   | <b>1.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1.50                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 1.28                                 |
| Other Inorganic Materials       | 93.11                                |
| Cellulosics                     | 8.65                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 8.22                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 32.89                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.49E+00                                   |
| Np-237  | 2.11E-05                                   |
| Pu-238  | 6.59E-01                                   |
| Pu-239  | 1.31E+01                                   |
| Pu-240  | 3.04E+00                                   |
| Pu-241  | 6.81E+01                                   |
| Pu-242  | 3.90E-04                                   |
| Th-229  | 3.60E-14                                   |
| Th-230  | 2.11E-08                                   |
| Th-232  | 2.01E-17                                   |
| U-233   | 2.61E-10                                   |
| U-234   | 7.86E-04                                   |
| U-235   | 2.51E-05                                   |
| U-236   | 2.71E-07                                   |
| U-238   | 2.22E-07                                   |

## Haz. Waste No(s).

D007

## TRUCON Code(s)

122/222

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF118.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3111                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |               |
|-----------------------------|-------------------|---------------|
| Container Type              | Ref. Waste Stream | Volume        |
| 55-gal Drum Dir Ld w/ Liner | RF118.01-S        | 1.0           |
| 55-gal POC - 12" w/ Liner   | RF118.01-S        | 1431.0        |
| 55-gal POC - 12" w/o Liner  | RF118.01-S        | 0.2           |
| <b>Emplaced Total</b>       |                   | <b>1432.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 11.29                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 1.26                                 |
| Other Inorganic Materials       | 16.19                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.32                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 527.11                               |
| Packaging Material, Plastic     | 36.99                                |
| Packaging Material, Cellulosics | 137.40                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.97E+00                                   |
| Am-243  | 8.75E-07                                   |
| Np-237  | 5.40E-05                                   |
| Pu-238  | 2.92E+00                                   |
| Pu-239  | 4.66E+01                                   |
| Pu-240  | 1.25E+01                                   |
| Pu-241  | 1.44E+02                                   |
| Pu-242  | 1.52E-03                                   |
| Th-229  | 3.12E-13                                   |
| Th-230  | 1.18E-08                                   |
| Th-232  | 3.31E-16                                   |
| U-233   | 1.18E-09                                   |
| U-234   | 2.44E-04                                   |
| U-235   | 6.48E-06                                   |
| U-236   | 2.23E-06                                   |
| U-238   | 1.40E-07                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F005

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF119.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                       |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3129      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | RF119.01-S        | 19.3        |
| 55-gal Drum Dir Ld w/o Liner | RF119.01-S        | 3.7         |
| 55-gal POC - 12" w/ Liner    | RF119.01-S        | 1.0         |
| <b>Emplaced Total</b>        |                   | <b>24.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 57.80                                |
| Aluminum-based Metals/Alloys    | 0.02                                 |
| Other Metals                    | 0.85                                 |
| Other Inorganic Materials       | 8.24                                 |
| Cellulosics                     | 0.30                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 15.73                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 245.52                               |
| Organic Matrix                  | 1.90                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 147.89                               |
| Packaging Material, Plastic     | 31.26                                |
| Packaging Material, Cellulosics | 5.93                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.42E+00                                   |
| Np-237  | 1.11E-05                                   |
| Pu-238  | 3.09E-01                                   |
| Pu-239  | 6.09E+00                                   |
| Pu-240  | 1.44E+00                                   |
| Pu-241  | 3.29E+01                                   |
| Pu-242  | 1.85E-04                                   |
| Th-229  | 8.58E-15                                   |
| Th-230  | 3.67E-10                                   |
| Th-232  | 4.20E-18                                   |
| U-233   | 9.27E-11                                   |
| U-234   | 2.13E-05                                   |
| U-235   | 7.22E-07                                   |
| U-236   | 8.52E-08                                   |
| U-238   | 8.83E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F005

## TRUCON Code(s)

111/211, 127/227

## Waste Stream Description

N/A



Waste Stream ID: **WP-RF121.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                     |                   |            |          |    |
|-------------|---|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Inorganic Non-Metal | Waste Matrix Code | S5129      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes          |                   |             |
|---------------------------|-------------------|-------------|
| Container Type            | Ref. Waste Stream | Volume      |
| 55-gal POC - 12" w/ Liner | RF121.01-S        | 46.0        |
| <b>Emplaced Total</b>     |                   | <b>46.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 5.55                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 6.66                                 |
| Other Inorganic Materials       | 11.10                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.33                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 527.40                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 137.50                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.07E+00                                   |
| Np-237  | 5.66E-06                                   |
| Pu-238  | 1.40E+00                                   |
| Pu-239  | 4.29E+01                                   |
| Pu-240  | 1.03E+01                                   |
| Pu-241  | 7.13E+01                                   |
| Pu-242  | 6.64E-04                                   |
| Th-229  | 4.53E-15                                   |
| Th-230  | 5.36E-10                                   |
| Th-232  | 6.77E-17                                   |
| U-233   | 4.26E-11                                   |
| U-234   | 2.59E-05                                   |
| U-235   | 5.71E-07                                   |
| U-236   | 9.14E-07                                   |
| U-238   | 3.94E-09                                   |

## Haz. Waste No(s).

D007, D008

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF122.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3129                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | RF122.01-S        | 0.2         |
| 55-gal Drum Dir Ld w/o Liner | RF122.01-S        | 1.5         |
| 55-gal POC - 12" w/ Liner    | RF122.01-S        | 33.9        |
| <b>Emplaced Total</b>        |                   | <b>35.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 10.47                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 12.08                                |
| Other Inorganic Materials       | 21.10                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 2.56                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 508.85                               |
| Packaging Material, Plastic     | 35.49                                |
| Packaging Material, Cellulosics | 131.07                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.68E+00                                   |
| Np-237  | 1.59E-03                                   |
| Pu-238  | 1.77E+00                                   |
| Pu-239  | 3.86E+01                                   |
| Pu-240  | 9.29E+00                                   |
| Pu-241  | 8.10E+01                                   |
| Pu-242  | 9.78E-04                                   |
| Th-229  | 5.04E-12                                   |
| Th-230  | 3.69E-10                                   |
| Th-232  | 1.09E-16                                   |
| U-233   | 2.69E-08                                   |
| U-234   | 2.04E-05                                   |
| U-235   | 1.52E-07                                   |
| U-236   | 1.10E-06                                   |
| U-238   | 5.91E-13                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, F001, F002,  
F005

## TRUCON Code(s)

111/211

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF122.03**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3129                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |            |
|-----------------------------|-------------------|------------|
| Container Type              | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner | RF122.03-S        | 4.4        |
| <b>Emplaced Total</b>       |                   | <b>4.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 424.32                               |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 6.64                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 163.06                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.60E+00                                   |
| Np-237  | 9.06E-05                                   |
| Pu-238  | 1.62E-01                                   |
| Pu-239  | 3.25E+00                                   |
| Pu-240  | 7.54E-01                                   |
| Pu-241  | 1.81E+01                                   |
| Pu-242  | 9.85E-05                                   |
| Th-229  | 7.14E-14                                   |
| Th-230  | 3.72E-08                                   |
| Th-232  | 2.21E-18                                   |
| U-233   | 7.69E-10                                   |
| U-234   | 2.07E-03                                   |
| U-235   | 1.39E-04                                   |
| U-236   | 4.47E-08                                   |
| U-238   | 7.77E-03                                   |

## Haz. Waste No(s).

D004, D005, D009, D010, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

111/211

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF122.04**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3129                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | RF122.04-S        | 54.1        |
| <b>Emplaced Total</b>       |                   | <b>54.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 662.72                               |
| Cellulosics                     | 0.28                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 8.45                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.50                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.71E+00                                   |
| Np-237  | 6.70E-05                                   |
| Pu-238  | 1.49E-01                                   |
| Pu-239  | 2.98E+00                                   |
| Pu-240  | 6.92E-01                                   |
| Pu-241  | 1.67E+01                                   |
| Pu-242  | 9.06E-05                                   |
| Th-229  | 5.28E-14                                   |
| Th-230  | 1.10E-08                                   |
| Th-232  | 2.03E-18                                   |
| U-233   | 5.68E-10                                   |
| U-234   | 6.12E-04                                   |
| U-235   | 6.47E-05                                   |
| U-236   | 4.10E-08                                   |
| U-238   | 4.33E-03                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D011

## TRUCON Code(s)

111/211, 127/227

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF122.05**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3129                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | RF122.05-S        | 16.2        |
| <b>Emplaced Total</b>       |                   | <b>16.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.15                                 |
| Other Inorganic Materials       | 519.58                               |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 49.09                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.78E-01                                   |
| Np-237  | 7.74E-07                                   |
| Pu-238  | 1.70E-02                                   |
| Pu-239  | 3.37E-01                                   |
| Pu-240  | 7.83E-02                                   |
| Pu-241  | 1.90E+00                                   |
| Pu-242  | 1.03E-05                                   |
| Th-229  | 5.71E-16                                   |
| Th-230  | 2.23E-08                                   |
| Th-232  | 2.29E-19                                   |
| U-233   | 6.25E-12                                   |
| U-234   | 1.24E-03                                   |
| U-235   | 6.46E-05                                   |
| U-236   | 4.64E-09                                   |
| U-238   | 2.40E-03                                   |

## Haz. Waste No(s).

D006, D007, D008, D009, D011, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

111/211, 112/212, 127/227

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF122.06**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                       |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3129      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |            |
|-----------------------------|-------------------|------------|
| Container Type              | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner | RF122.06-S        | 0.4        |
| 55-gal POC - 12" w/ Liner   | RF122.06-S        | 6.9        |
| <b>Emplaced Total</b>       |                   | <b>7.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 9.30                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 12.03                                |
| Other Inorganic Materials       | 48.94                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 2.65                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 504.74                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 129.64                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.70E+00                                   |
| Np-237  | 5.39E-05                                   |
| Pu-238  | 1.38E+00                                   |
| Pu-239  | 3.47E+01                                   |
| Pu-240  | 8.19E+00                                   |
| Pu-241  | 7.15E+01                                   |
| Pu-242  | 8.75E-04                                   |
| Th-229  | 1.51E-13                                   |
| Th-230  | 1.87E-09                                   |
| Th-232  | 9.60E-17                                   |
| U-233   | 8.32E-10                                   |
| U-234   | 5.99E-05                                   |
| U-235   | 1.91E-06                                   |
| U-236   | 9.72E-07                                   |
| U-238   | 3.86E-05                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D011

## TRUCON Code(s)

111/211

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF123.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3119                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                  |                   |            |
|-----------------------------------|-------------------|------------|
| Container Type                    | Ref. Waste Stream | Volume     |
| 55-gal POC - 12" w/ Liner         | RF123.01-S        | 7.5        |
| SWB w/ 4 - 55-gal Drums w/ Liners | RF123.01-S        | 1.9        |
| <b>Emplaced Total</b>             |                   | <b>9.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 5.09                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 5.89                                 |
| Other Inorganic Materials       | 9.14                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.18                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 463.65                               |
| Packaging Material, Plastic     | 32.83                                |
| Packaging Material, Cellulosics | 109.79                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.64E+00                                   |
| Np-237  | 1.54E-05                                   |
| Pu-238  | 1.08E+00                                   |
| Pu-239  | 3.23E+01                                   |
| Pu-240  | 7.51E+00                                   |
| Pu-241  | 6.91E+01                                   |
| Pu-242  | 5.30E-04                                   |
| Th-229  | 3.12E-14                                   |
| Th-230  | 1.55E-09                                   |
| Th-232  | 8.80E-17                                   |
| U-233   | 1.90E-10                                   |
| U-234   | 4.92E-05                                   |
| U-235   | 1.54E-06                                   |
| U-236   | 8.91E-07                                   |
| U-238   | 1.06E-08                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D018, D019,  
D022, D028, D029,  
D043, F001, F002,  
F005

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF123.02**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3119                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |            |
|------------------------------|-------------------|------------|
| Container Type               | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner  | RF123.02-S        | 0.6        |
| 55-gal Drum Dir Ld w/o Liner | RF123.02-S        | 0.2        |
| <b>Emplaced Total</b>        |                   | <b>0.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 29.16                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 128.43                               |
| Cellulosics                     | 6.49                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 2.51                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 27.75                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.67E-02                                   |
| Np-237  | 1.03E-08                                   |
| Pu-238  | 5.08E-03                                   |
| Pu-239  | 9.99E-02                                   |
| Pu-240  | 2.33E-02                                   |
| Pu-241  | 5.65E-01                                   |
| Pu-242  | 3.07E-06                                   |
| Th-229  | 2.72E-18                                   |
| Th-230  | 5.05E-09                                   |
| Th-232  | 6.81E-20                                   |
| U-233   | 4.39E-14                                   |
| U-234   | 2.81E-04                                   |
| U-235   | 3.24E-05                                   |
| U-236   | 1.38E-09                                   |
| U-238   | 2.52E-03                                   |

## Haz. Waste No(s).

D010, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

122/222

## Waste Stream Description

N/A



Waste Stream ID: **WP-RF123.03**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3119                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | RF123.03-S        | 11.9        |
| 55-gal Drum Dir Ld w/o Liner | RF123.03-S        | 0.2         |
| <b>Emplaced Total</b>        |                   | <b>12.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 5.34                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 25.98                                |
| Cellulosics                     | 11.41                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 2.72                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.96                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 36.36                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.47E+01                                   |
| Np-237  | 2.08E-04                                   |
| Pu-238  | 8.59E-01                                   |
| Pu-239  | 1.71E+01                                   |
| Pu-240  | 3.97E+00                                   |
| Pu-241  | 9.17E+01                                   |
| Pu-242  | 5.23E-04                                   |
| Th-229  | 3.54E-13                                   |
| Th-230  | 4.67E-10                                   |
| Th-232  | 2.62E-17                                   |
| U-233   | 2.57E-09                                   |
| U-234   | 2.10E-05                                   |
| U-235   | 1.62E-06                                   |
| U-236   | 3.53E-07                                   |
| U-238   | 1.22E-04                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF123.04**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                       |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3119      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | RF123.04-S        | 44.5        |
| <b>Emplaced Total</b>       |                   | <b>44.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.39                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.01                                 |
| Other Inorganic Materials       | 17.76                                |
| Cellulosics                     | 1.10                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.27                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.76                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.96E+00                                   |
| Np-237  | 2.14E-05                                   |
| Pu-238  | 9.18E-01                                   |
| Pu-239  | 1.81E+01                                   |
| Pu-240  | 4.23E+00                                   |
| Pu-241  | 9.80E+01                                   |
| Pu-242  | 5.59E-04                                   |
| Th-229  | 3.61E-14                                   |
| Th-230  | 5.89E-10                                   |
| Th-232  | 2.79E-17                                   |
| U-233   | 2.62E-10                                   |
| U-234   | 2.58E-05                                   |
| U-235   | 6.84E-07                                   |
| U-236   | 3.76E-07                                   |
| U-238   | 5.86E-06                                   |

## Haz. Waste No(s).

D007, D008, F005

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF124.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5311                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | RF124.01-S        | 91.5        |
| 55-gal Drum Dir Ld w/o Liner | RF124.01-S        | 0.8         |
| SWB Dir Ld w/o Liner         | RF124.01-S        | 1.9         |
| <b>Emplaced Total</b>        |                   | <b>94.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.02                                 |
| Aluminum-based Metals/Alloys    | 0.01                                 |
| Other Metals                    | 223.31                               |
| Other Inorganic Materials       | 0.82                                 |
| Cellulosics                     | 0.75                                 |
| Rubber                          | 129.33                               |
| Plastics                        | 8.27                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 131.26                               |
| Packaging Material, Plastic     | 35.93                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.00E-01                                   |
| Am-243  | 4.78E-08                                   |
| Np-237  | 1.54E-05                                   |
| Pu-238  | 1.20E-01                                   |
| Pu-239  | 2.62E+00                                   |
| Pu-240  | 6.04E-01                                   |
| Pu-241  | 1.14E+01                                   |
| Pu-242  | 6.99E-05                                   |
| Th-229  | 7.45E-14                                   |
| Th-230  | 3.38E-09                                   |
| Th-232  | 1.11E-17                                   |
| U-233   | 3.20E-10                                   |
| U-234   | 7.60E-05                                   |
| U-235   | 1.33E-06                                   |
| U-236   | 8.95E-08                                   |
| U-238   | 1.51E-06                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

116/216, 123/223

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF124.02**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5311      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |             |
|------------------------------|-------------------|-------------|
| Container Type               | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner  | RF124.02-S        | 13.1        |
| 55-gal Drum Dir Ld w/o Liner | RF124.02-S        | 0.2         |
| <b>Emplaced Total</b>        |                   | <b>13.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.26                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 207.17                               |
| Other Inorganic Materials       | 2.78                                 |
| Cellulosics                     | 0.98                                 |
| Rubber                          | 123.26                               |
| Plastics                        | 8.93                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 36.42                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.07E-01                                   |
| Np-237  | 1.06E-05                                   |
| Pu-238  | 2.41E-01                                   |
| Pu-239  | 5.01E+00                                   |
| Pu-240  | 1.15E+00                                   |
| Pu-241  | 2.23E+01                                   |
| Pu-242  | 1.38E-04                                   |
| Th-229  | 4.82E-14                                   |
| Th-230  | 1.12E-09                                   |
| Th-232  | 2.10E-17                                   |
| U-233   | 2.10E-10                                   |
| U-234   | 2.66E-05                                   |
| U-235   | 7.69E-07                                   |
| U-236   | 1.70E-07                                   |
| U-238   | 6.59E-09                                   |

## Haz. Waste No(s).

D008, D022, D028,  
F001, F002

## TRUCON Code(s)

123/223

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF125.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Organics | Waste Matrix Code | S3900                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                  |                   |             |
|-----------------------------------|-------------------|-------------|
| Container Type                    | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner       | RF125.01-S        | 3.3         |
| 55-gal Drum Dir Ld w/o Liner      | RF125.01-S        | 1.0         |
| 55-gal POC - 12" w/ Liner         | RF125.01-S        | 6.2         |
| SWB w/ 4 - 55-gal Drums w/ Liners | RF125.01-S        | 3.8         |
| <b>Emplaced Total</b>             |                   | <b>14.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 10.07                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 2.84                                 |
| Other Inorganic Materials       | 2.40                                 |
| Cellulosics                     | 0.76                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.35                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 11.23                                |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 323.90                               |
| Packaging Material, Plastic     | 28.89                                |
| Packaging Material, Cellulosics | 59.63                                |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.53E+01                                   |
| Np-237  | 3.13E-04                                   |
| Pu-238  | 1.08E+00                                   |
| Pu-239  | 2.69E+01                                   |
| Pu-240  | 6.22E+00                                   |
| Pu-241  | 7.80E+01                                   |
| Pu-242  | 5.32E-04                                   |
| Th-229  | 5.58E-13                                   |
| Th-230  | 1.65E-08                                   |
| Th-232  | 4.10E-17                                   |
| U-233   | 4.00E-09                                   |
| U-234   | 6.16E-04                                   |
| U-235   | 2.00E-05                                   |
| U-236   | 5.53E-07                                   |
| U-238   | 4.37E-05                                   |

## Haz. Waste No(s).

D004, D005, D009, D010, D022, D027, D028, D029, D032, D033, D034, D043, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF126.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                     |                   |            |          |    |
|-------------|---|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Solidified Organics | Waste Matrix Code | S3229      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes          |                   |            |
|---------------------------|-------------------|------------|
| Container Type            | Ref. Waste Stream | Volume     |
| 55-gal POC - 12" w/ Liner | RF126.01-S        | 1.0        |
| <b>Emplaced Total</b>     |                   | <b>1.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 8.65                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 11.54                                |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 2.31                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 13.94                                |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 527.40                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 137.50                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.16E+00                                   |
| Np-237  | 3.84E-06                                   |
| Pu-238  | 1.46E+00                                   |
| Pu-239  | 3.73E+01                                   |
| Pu-240  | 8.35E+00                                   |
| Pu-241  | 8.55E+01                                   |
| Pu-242  | 5.23E-04                                   |
| Th-229  | 2.29E-15                                   |
| Th-230  | 1.21E-09                                   |
| Th-232  | 5.50E-17                                   |
| U-233   | 2.47E-11                                   |
| U-234   | 5.10E-05                                   |
| U-235   | 1.35E-06                                   |
| U-236   | 7.43E-07                                   |
| U-238   | 1.10E-08                                   |

## Haz. Waste No(s).

D007

## TRUCON Code(s)

126/226

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF126.04**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Organics | Waste Matrix Code | S3229                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes          |                   |            |
|---------------------------|-------------------|------------|
| Container Type            | Ref. Waste Stream | Volume     |
| 55-gal POC - 12" w/ Liner | RF126.04-S        | 2.1        |
| <b>Emplaced Total</b>     |                   | <b>2.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 6.06                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 8.08                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.62                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 11.15                                |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 527.40                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 137.50                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.29E+00                                   |
| Np-237  | 4.98E-06                                   |
| Pu-238  | 1.21E+00                                   |
| Pu-239  | 3.40E+01                                   |
| Pu-240  | 7.85E+00                                   |
| Pu-241  | 7.25E+01                                   |
| Pu-242  | 6.09E-04                                   |
| Th-229  | 3.00E-15                                   |
| Th-230  | 1.82E-09                                   |
| Th-232  | 5.17E-17                                   |
| U-233   | 3.22E-11                                   |
| U-234   | 7.27E-05                                   |
| U-235   | 1.73E-06                                   |
| U-236   | 6.98E-07                                   |
| U-238   | 1.51E-08                                   |

## Haz. Waste No(s).

D007, D008, F001, F002

## TRUCON Code(s)

126/226

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF128.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                       |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3119      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes          |                   |              |
|---------------------------|-------------------|--------------|
| Container Type            | Ref. Waste Stream | Volume       |
| 55-gal POC - 12" w/ Liner | RF128.01-S        | 198.2        |
| <b>Emplaced Total</b>     |                   | <b>198.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 4.71                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 5.88                                 |
| Other Inorganic Materials       | 9.14                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.18                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 527.40                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 137.50                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.75E+00                                   |
| Np-237  | 1.83E-05                                   |
| Pu-238  | 1.90E+00                                   |
| Pu-239  | 4.29E+01                                   |
| Pu-240  | 1.04E+01                                   |
| Pu-241  | 9.42E+01                                   |
| Pu-242  | 7.61E-04                                   |
| Th-229  | 6.75E-14                                   |
| Th-230  | 6.47E-10                                   |
| Th-232  | 1.90E-16                                   |
| U-233   | 3.13E-10                                   |
| U-234   | 2.81E-05                                   |
| U-235   | 2.28E-07                                   |
| U-236   | 1.54E-06                                   |
| U-238   | 1.47E-10                                   |

## Haz. Waste No(s).

D005, D006, D007,  
D008, D010, D011

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A



Waste Stream ID: **WP-RF129.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |              |
|------------------------------|-------------------|--------------|
| Container Type               | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner  | RF129.01-S        | 8.3          |
| 55-gal Drum Dir Ld w/o Liner | RF129.01-S        | 0.6          |
| 55-gal POC - 12" w/ Liner    | RF129.01-S        | 3.3          |
| SWB Dir Ld w/o Liner         | RF129.01-S        | 455.5        |
| <b>Emplaced Total</b>        |                   | <b>467.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 151.84                               |
| Aluminum-based Metals/Alloys    | 1.45                                 |
| Other Metals                    | 23.51                                |
| Other Inorganic Materials       | 20.31                                |
| Cellulosics                     | 14.40                                |
| Rubber                          | 2.70                                 |
| Plastics                        | 26.27                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.22                                 |
| Organic Matrix                  | 0.61                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 155.73                               |
| Packaging Material, Plastic     | 0.92                                 |
| Packaging Material, Cellulosics | 0.98                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.40E-01                                   |
| Am-243  | 2.19E-07                                   |
| Cs-137  | 2.28E-07                                   |
| Np-237  | 4.52E-06                                   |
| Pu-238  | 9.75E-02                                   |
| Pu-239  | 1.86E+00                                   |
| Pu-240  | 4.44E-01                                   |
| Pu-241  | 1.00E+01                                   |
| Pu-242  | 5.81E-05                                   |
| Pu-244  | 9.20E-24                                   |
| Th-229  | 7.69E-15                                   |
| Th-230  | 2.25E-09                                   |
| Th-232  | 2.93E-18                                   |
| U-233   | 5.58E-11                                   |
| U-234   | 8.39E-05                                   |
| U-235   | 2.93E-06                                   |
| U-236   | 3.95E-08                                   |
| U-238   | 1.33E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D029, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **WP-RF129.05**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes             |                   |              |
|------------------------------|-------------------|--------------|
| Container Type               | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner  | RF129.05-S        | 2.1          |
| 55-gal Drum Dir Ld w/o Liner | RF129.05-S        | 0.2          |
| SWB Dir Ld w/o Liner         | RF129.05-S        | 446.0        |
| <b>Emplaced Total</b>        |                   | <b>448.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 182.14                               |
| Aluminum-based Metals/Alloys    | 0.66                                 |
| Other Metals                    | 61.87                                |
| Other Inorganic Materials       | 6.36                                 |
| Cellulosics                     | 8.09                                 |
| Rubber                          | 2.72                                 |
| Plastics                        | 22.28                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.26                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.38                               |
| Packaging Material, Plastic     | 0.17                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.43E-01                                   |
| Am-243  | 7.64E-07                                   |
| Np-237  | 2.23E-05                                   |
| Pu-238  | 9.17E-02                                   |
| Pu-239  | 1.68E+00                                   |
| Pu-240  | 4.05E-01                                   |
| Pu-241  | 9.67E+00                                   |
| Pu-242  | 5.51E-05                                   |
| Th-229  | 4.02E-14                                   |
| Th-230  | 3.56E-10                                   |
| Th-232  | 2.67E-18                                   |
| U-233   | 2.87E-10                                   |
| U-234   | 1.36E-05                                   |
| U-235   | 4.19E-07                                   |
| U-236   | 3.60E-08                                   |
| U-238   | 1.41E-07                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF130.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                 |                   |            |                                       |      |
|-------------|---|-----------------------|-----------------|-------------------|------------|---------------------------------------|------|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5490      | Handling                              | CH   |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006 | Activity Concentrations Decayed to CY | 2006 |
| Stream Name | N/A                                       |                       |                 |                   |            |                                       |      |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                  |                   |             |
|-----------------------------------|-------------------|-------------|
| Container Type                    | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner       | RF130.01-S        | 25.4        |
| 55-gal Drum Dir Ld w/o Liner      | RF130.01-S        | 1.9         |
| SWB w/ 4 - 55-gal Drums w/ Liners | RF130.01-S        | 11.3        |
| <b>Emplaced Total</b>             |                   | <b>38.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 13.34                                |
| Aluminum-based Metals/Alloys    | 1.41                                 |
| Other Metals                    | 6.65                                 |
| Other Inorganic Materials       | 8.05                                 |
| Cellulosics                     | 0.81                                 |
| Rubber                          | 0.13                                 |
| Plastics                        | 7.57                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 2.91                                 |
| Organic Matrix                  | 7.06                                 |
| Soils/gravel                    | 0.03                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 154.40                               |
| Packaging Material, Plastic     | 29.12                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.16E+00                                   |
| Cm-244  | 3.61E-09                                   |
| Cs-137  | 1.78E-05                                   |
| Np-237  | 2.10E-04                                   |
| Pu-238  | 6.50E-01                                   |
| Pu-239  | 1.28E+01                                   |
| Pu-240  | 2.99E+00                                   |
| Pu-241  | 6.94E+01                                   |
| Pu-242  | 3.95E-04                                   |
| Pu-244  | 4.41E-18                                   |
| Sr-90   | 8.66E-04                                   |
| Th-229  | 3.78E-13                                   |
| Th-230  | 1.28E-07                                   |
| Th-232  | 1.18E-10                                   |
| U-233   | 2.70E-09                                   |
| U-234   | 1.05E-03                                   |
| U-235   | 4.10E-05                                   |
| U-236   | 2.66E-07                                   |
| U-238   | 5.93E-05                                   |

## Haz. Waste No(s).

D004, D005, D008, D009, D010, D022, D027, D028, D029, D032, D033, D034, D043, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF134.02**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Soils           | Waste Matrix Code | S4200      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes      |                   |             |
|-----------------------|-------------------|-------------|
| Container Type        | Ref. Waste Stream | Volume      |
| SWB Dir Ld w/o Liner  | RF134.02-S        | 11.3        |
| <b>Emplaced Total</b> |                   | <b>11.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 3.35                                 |
| Aluminum-based Metals/Alloys    | 2.23                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.63                                 |
| Cellulosics                     | 10.66                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 10.56                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 666.10                               |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.81E-02                                   |
| Np-237  | 1.65E-08                                   |
| Pu-238  | 4.08E-03                                   |
| Pu-239  | 8.16E-02                                   |
| Pu-240  | 1.90E-02                                   |
| Pu-241  | 4.37E-01                                   |
| Pu-242  | 2.49E-06                                   |
| Th-229  | 9.81E-18                                   |
| Th-230  | 4.76E-13                                   |
| Th-232  | 1.25E-19                                   |
| U-233   | 1.06E-13                                   |
| U-234   | 3.51E-08                                   |
| U-235   | 2.42E-10                                   |
| U-236   | 1.69E-09                                   |
| U-238   | 1.13E-15                                   |

## Haz. Waste No(s).

F001, F002, F005

## TRUCON Code(s)

121/221

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF135.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Organics | Waste Matrix Code | S3290                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |            |
|-----------------------------|-------------------|------------|
| Container Type              | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner | RF135.01-S        | 2.3        |
| <b>Emplaced Total</b>       |                   | <b>2.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 5.51                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 802.10                               |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.18E+00                                   |
| Np-237  | 2.19E-05                                   |
| Pu-238  | 7.13E-02                                   |
| Pu-239  | 1.45E+00                                   |
| Pu-240  | 3.36E-01                                   |
| Pu-241  | 7.68E+00                                   |
| Pu-242  | 4.38E-05                                   |
| Th-229  | 3.76E-14                                   |
| Th-230  | 3.80E-09                                   |
| Th-232  | 2.21E-18                                   |
| U-233   | 2.72E-10                                   |
| U-234   | 1.41E-04                                   |
| U-235   | 1.63E-05                                   |
| U-236   | 2.98E-08                                   |
| U-238   | 1.26E-03                                   |

## Haz. Waste No(s).

D022, D026, D027, D029, D030, D032, D034, D036, D037, F001, F002

## TRUCON Code(s)

112/212

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF135.02**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                     |                   |                                       |          |    |
|-------------|---|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Organics | Waste Matrix Code | S3290                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | RF135.02-S        | 10.4        |
| <b>Emplaced Total</b>       |                   | <b>10.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1.82                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.61                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.42                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 446.57                               |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.27E-01                                   |
| Np-237  | 1.22E-06                                   |
| Pu-238  | 2.97E-02                                   |
| Pu-239  | 5.94E-01                                   |
| Pu-240  | 1.38E-01                                   |
| Pu-241  | 3.32E+00                                   |
| Pu-242  | 1.80E-05                                   |
| Th-229  | 9.57E-16                                   |
| Th-230  | 7.12E-09                                   |
| Th-232  | 4.03E-19                                   |
| U-233   | 1.03E-11                                   |
| U-234   | 3.96E-04                                   |
| U-235   | 1.28E-05                                   |
| U-236   | 8.17E-09                                   |
| U-238   | 1.13E-07                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D026, D027, D028, D029, D030, D032, D034, D036, D043, F001, F002, F005

## TRUCON Code(s)

112/212

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF137.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3119                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |            |
|-----------------------------|-------------------|------------|
| Container Type              | Ref. Waste Stream | Volume     |
| 55-gal Drum Dir Ld w/ Liner | RF137.01-S        | 0.4        |
| <b>Emplaced Total</b>       |                   | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 29.18                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 240.94                               |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 1.49                                 |
| Plastics                        | 20.22                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.17E-01                                   |
| Np-237  | 8.31E-06                                   |
| Pu-238  | 7.98E-02                                   |
| Pu-239  | 1.64E+00                                   |
| Pu-240  | 3.79E-01                                   |
| Pu-241  | 8.62E+00                                   |
| Pu-242  | 4.92E-05                                   |
| Th-229  | 1.46E-14                                   |
| Th-230  | 9.31E-12                                   |
| Th-232  | 2.50E-18                                   |
| U-233   | 1.05E-10                                   |
| U-234   | 6.88E-07                                   |
| U-235   | 4.85E-09                                   |
| U-236   | 3.37E-08                                   |
| U-238   | 2.23E-14                                   |

## Haz. Waste No(s).

D007, D008

## TRUCON Code(s)

122/222

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF139.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                   |                                       |          |    |
|-------------|---|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3121                                 | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                                       |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | RF139.01-S        | 11.6        |
| <b>Emplaced Total</b>       |                   | <b>11.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 44.57                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 4.14                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 744.45                               |
| Organic Matrix                  | 14.88                                |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.13E+01                                   |
| Np-237  | 2.76E-04                                   |
| Pu-238  | 1.42E-01                                   |
| Pu-239  | 2.87E+00                                   |
| Pu-240  | 6.66E-01                                   |
| Pu-241  | 1.60E+01                                   |
| Pu-242  | 8.68E-05                                   |
| Th-229  | 2.15E-13                                   |
| Th-230  | 3.78E-09                                   |
| Th-232  | 1.95E-18                                   |
| U-233   | 2.32E-09                                   |
| U-234   | 2.10E-04                                   |
| U-235   | 1.71E-05                                   |
| U-236   | 3.95E-08                                   |
| U-238   | 1.11E-03                                   |

## Haz. Waste No(s).

D004, D005, D009, D010, F001, F002, F005, F006, F007, F009

## TRUCON Code(s)

111/211

## Waste Stream Description

N/A



Waste Stream ID: **WP-RF140.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                 |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5420      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |              |
|-----------------------------|-------------------|--------------|
| Container Type              | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner | RF140.01-S        | 4.0          |
| SWB Dir Ld w/o Liner        | RF140.01-S        | 168.2        |
| <b>Emplaced Total</b>       |                   | <b>172.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 149.72                               |
| Aluminum-based Metals/Alloys    | 2.38                                 |
| Other Metals                    | 60.72                                |
| Other Inorganic Materials       | 47.21                                |
| Cellulosics                     | 4.14                                 |
| Rubber                          | 1.58                                 |
| Plastics                        | 5.57                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.02                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 152.98                               |
| Packaging Material, Plastic     | 0.85                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.77E-01                                   |
| Am-243  | 7.90E-08                                   |
| Np-237  | 2.35E-06                                   |
| Pu-238  | 7.87E-02                                   |
| Pu-239  | 1.44E+00                                   |
| Pu-240  | 3.49E-01                                   |
| Pu-241  | 8.28E+00                                   |
| Pu-242  | 4.72E-05                                   |
| Th-229  | 4.00E-15                                   |
| Th-230  | 2.84E-11                                   |
| Th-232  | 2.30E-18                                   |
| U-233   | 2.90E-11                                   |
| U-234   | 1.39E-06                                   |
| U-235   | 2.72E-08                                   |
| U-236   | 3.10E-08                                   |
| U-238   | 2.03E-10                                   |

## Haz. Waste No(s).

D005, D008, D009,  
D011, F001, F002,  
F005, F006, F007,  
F009

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF141.01**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                       |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3119      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes          |                   |             |
|---------------------------|-------------------|-------------|
| Container Type            | Ref. Waste Stream | Volume      |
| 55-gal POC - 12" w/ Liner | RF141.01-S        | 45.6        |
| <b>Emplaced Total</b>     |                   | <b>45.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 7.30                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 8.83                                 |
| Other Inorganic Materials       | 14.35                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.77                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.01                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 527.40                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 137.50                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.64E+00                                   |
| Np-237  | 3.31E-06                                   |
| Pu-238  | 1.58E+00                                   |
| Pu-239  | 3.99E+01                                   |
| Pu-240  | 9.36E+00                                   |
| Pu-241  | 9.89E+01                                   |
| Pu-242  | 6.16E-04                                   |
| Th-229  | 1.96E-15                                   |
| Th-230  | 1.58E-07                                   |
| Th-232  | 6.17E-17                                   |
| U-233   | 2.11E-11                                   |
| U-234   | 5.86E-03                                   |
| U-235   | 1.88E-04                                   |
| U-236   | 8.33E-07                                   |
| U-238   | 1.66E-06                                   |

## Haz. Waste No(s).

D006, D007, D008

## TRUCON Code(s)

122/222, 130/230

## Waste Stream Description

N/A

Waste Stream ID: **WP-RF141.02**

## Appendix B

## TRU Waste Inventory Profile Report

|             |   |                                       |                       |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Rocky Flats Environmental Technology Site | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3119      | Handling | CH |
| Source Cat. | N/A                                       | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                                       | Activity Concentrations Decayed to CY |                       |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes          |                   |              |
|---------------------------|-------------------|--------------|
| Container Type            | Ref. Waste Stream | Volume       |
| 55-gal POC - 12" w/ Liner | RF141.02-S        | 176.0        |
| <b>Emplaced Total</b>     |                   | <b>176.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 5.27                                 |
| Aluminum-based Metals/Alloys    | 0.01                                 |
| Other Metals                    | 6.35                                 |
| Other Inorganic Materials       | 11.00                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 1.27                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 527.40                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 137.50                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.07E+00                                   |
| Np-237  | 1.39E-03                                   |
| Pu-238  | 1.59E+00                                   |
| Pu-239  | 4.22E+01                                   |
| Pu-240  | 1.01E+01                                   |
| Pu-241  | 9.35E+01                                   |
| Pu-242  | 8.65E-04                                   |
| Th-229  | 2.54E-12                                   |
| Th-230  | 4.50E-08                                   |
| Th-232  | 6.64E-17                                   |
| U-233   | 1.81E-08                                   |
| U-234   | 1.67E-03                                   |
| U-235   | 5.36E-05                                   |
| U-236   | 8.97E-07                                   |
| U-238   | 4.73E-07                                   |

## Haz. Waste No(s).

D007, D008

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A

Waste Stream ID: **WP-RLCBWD.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                         |                                       |                 |                   |            |          |    |
|-------------|-------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | N/A                     | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                     | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                     |                   |             |
|--------------------------------------|-------------------|-------------|
| Container Type                       | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/o Liner         | RLCBWD.001-S      | 4.8         |
| TDOP w/ 10 - 55-gal Drums w/o Liners | RLCBWD.001-S      | 9.6         |
| <b>Emplaced Total</b>                |                   | <b>14.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 14.09                                |
| Aluminum-based Metals/Alloys    | 0.05                                 |
| Other Metals                    | 0.62                                 |
| Other Inorganic Materials       | 30.33                                |
| Cellulosics                     | 19.98                                |
| Rubber                          | 3.83                                 |
| Plastics                        | 19.62                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 188.76                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.27E+00                                   |
| Cs-137  | 3.31E-08                                   |
| Np-237  | 8.06E-06                                   |
| Pu-238  | 2.78E-01                                   |
| Pu-239  | 1.65E+00                                   |
| Pu-240  | 7.79E-01                                   |
| Pu-241  | 1.21E+01                                   |
| Pu-242  | 1.18E-04                                   |
| Sr-90   | 3.01E-08                                   |
| U-233   | 3.35E-04                                   |
| U-234   | 4.23E-05                                   |
| U-235   | 1.36E-06                                   |
| U-238   | 1.70E-05                                   |

## Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, F001, F002, F003, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-RLCFFD.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                         |                                       |                 |                   |            |          |    |
|-------------|-------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | N/A                     | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                     | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                   |              |
|-------------------------------------|-------------------|--------------|
| Container Type                      | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner         | RLCFFD.001-S      | 198.0        |
| 55-gal Drum Dir Ld w/o Liner        | RLCFFD.001-S      | 1.0          |
| TDOP w/ 10 - 55-gal Drums w/ Liners | RLCFFD.001-S      | 62.3         |
| <b>Emplaced Total</b>               |                   | <b>261.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 377.31                               |
| Aluminum-based Metals/Alloys    | 1.97                                 |
| Other Metals                    | 0.39                                 |
| Other Inorganic Materials       | 37.11                                |
| Cellulosics                     | 42.04                                |
| Rubber                          | 8.98                                 |
| Plastics                        | 59.65                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.06                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 151.51                               |
| Packaging Material, Plastic     | 31.87                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.81E+00                                   |
| Np-237  | 5.92E-07                                   |
| Pu-238  | 3.64E-01                                   |
| Pu-239  | 2.22E+00                                   |
| Pu-240  | 1.12E+00                                   |
| Pu-241  | 1.58E+01                                   |
| Pu-242  | 1.71E-04                                   |
| Th-229  | 4.14E-17                                   |
| Th-230  | 1.39E-10                                   |
| Th-232  | 4.99E-09                                   |
| U-233   | 1.31E-12                                   |
| U-234   | 1.60E-05                                   |
| U-235   | 5.00E-07                                   |
| U-236   | 3.33E-08                                   |
| U-238   | 1.11E-05                                   |

## Haz. Waste No(s).

D007, D008, D009,  
F001, F002, F003,  
F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-RLHMOX.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                         |                       |                     |                   |                                       |          |    |
|-------------|-------------------------|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5120                                 | Handling | CH |
| Source Cat. | N/A                     | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                     |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes           |                   |              |
|----------------------------|-------------------|--------------|
| Container Type             | Ref. Waste Stream | Volume       |
| 55-gal POC - 12" w/ Liner  | RLHMOX.001-S      | 182.4        |
| 55-gal POC - 12" w/o Liner | RLHMOX.001-S      | 11.2         |
| <b>Emplaced Total</b>      |                   | <b>193.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 17.08                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 527.40                               |
| Packaging Material, Plastic     | 34.85                                |
| Packaging Material, Cellulosics | 137.50                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.59E+01                                   |
| Am-243  | 2.22E-06                                   |
| Cs-137  | 3.27E-06                                   |
| Np-237  | 2.12E-03                                   |
| Pu-238  | 8.75E+00                                   |
| Pu-239  | 4.00E+01                                   |
| Pu-240  | 2.03E+01                                   |
| Pu-241  | 3.22E+02                                   |
| Pu-242  | 1.01E-02                                   |
| Sr-90   | 2.94E-06                                   |
| Th-229  | 3.84E-12                                   |
| Th-230  | 1.05E-07                                   |
| Th-232  | 1.34E-16                                   |
| U-233   | 2.74E-08                                   |
| U-234   | 3.94E-03                                   |
| U-235   | 2.50E-04                                   |
| U-236   | 1.81E-06                                   |
| U-238   | 3.06E-03                                   |

## Haz. Waste No(s).

D005, D006, D007,  
D008, D011

## TRUCON Code(s)

122/222

## Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **WP-RLM308D.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                         |                                       |                 |                   |            |          |    |
|-------------|-------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | N/A                     | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                     | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                     |                   |             |
|--------------------------------------|-------------------|-------------|
| Container Type                       | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/o Liner         | RLM308D.001-S     | 4.0         |
| 55-gal POC - 12" w/ Liner            | RLM308D.001-S     | 24.8        |
| TDOP w/ 10 - 55-gal Drums w/o Liners | RLM308D.001-S     | 33.5        |
| <b>Emplaced Total</b>                |                   | <b>62.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 43.43                                |
| Aluminum-based Metals/Alloys    | 0.14                                 |
| Other Metals                    | 7.80                                 |
| Other Inorganic Materials       | 7.09                                 |
| Cellulosics                     | 6.31                                 |
| Rubber                          | 2.49                                 |
| Plastics                        | 15.49                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 335.36                               |
| Packaging Material, Plastic     | 14.72                                |
| Packaging Material, Cellulosics | 54.69                                |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.03E+01                                   |
| Am-243  | 1.74E-05                                   |
| Cs-137  | 6.49E-05                                   |
| Np-237  | 3.14E-04                                   |
| Pu-238  | 8.97E+00                                   |
| Pu-239  | 1.48E+01                                   |
| Pu-240  | 9.49E+00                                   |
| Pu-241  | 1.86E+02                                   |
| Pu-242  | 9.25E-03                                   |
| Sr-90   | 5.88E-05                                   |
| Th-229  | 3.70E-09                                   |
| Th-230  | 1.21E-08                                   |
| Th-232  | 1.43E-06                                   |
| U-233   | 1.97E-05                                   |
| U-234   | 6.96E-04                                   |
| U-235   | 2.30E-05                                   |
| U-236   | 5.63E-07                                   |
| U-238   | 3.65E-04                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, F001, F002, F003

## TRUCON Code(s)

117/217, 125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-RLMHASH.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                         |                       |                       |                   |                                       |          |    |
|-------------|-------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3111                                 | Handling | CH |
| Source Cat. | N/A                     | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                     |                       |                       |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes           |                   |             |
|----------------------------|-------------------|-------------|
| Container Type             | Ref. Waste Stream | Volume      |
| 55-gal POC - 12" w/ Liner  | RLMHASH.001-S     | 61.6        |
| 55-gal POC - 12" w/o Liner | RLMHASH.001-S     | 0.2         |
| <b>Emplaced Total</b>      |                   | <b>61.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 16.75                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 527.40                               |
| Packaging Material, Plastic     | 36.88                                |
| Packaging Material, Cellulosics | 137.50                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.21E+01                                   |
| Cs-137  | 6.07E-08                                   |
| Np-237  | 1.97E-05                                   |
| Pu-238  | 1.25E+00                                   |
| Pu-239  | 3.93E+01                                   |
| Pu-240  | 9.73E+00                                   |
| Pu-241  | 5.68E+01                                   |
| Pu-242  | 1.32E-03                                   |
| Sr-90   | 2.87E-08                                   |
| Th-229  | 1.31E-08                                   |
| Th-230  | 4.09E-10                                   |
| Th-232  | 1.78E-16                                   |
| U-233   | 2.80E-05                                   |
| U-234   | 1.81E-05                                   |
| U-235   | 2.04E-07                                   |
| U-236   | 1.44E-06                                   |
| U-238   | 9.93E-13                                   |

## Haz. Waste No(s).

D005, D006, D007,  
D008, D011

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A



Waste Stream ID: **WP-RLMPDT.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                         |                       |                 |                   |                                       |          |    |
|-------------|-------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5490                                 | Handling | CH |
| Source Cat. | N/A                     | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                     |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                     |                   |               |
|--------------------------------------|-------------------|---------------|
| Container Type                       | Ref. Waste Stream | Volume        |
| 55-gal Drum Dir Ld w/ Liner          | RLMPDT.001-S      | 2.1           |
| 55-gal Drum Dir Ld w/o Liner         | RLMPDT.001-S      | 260.4         |
| 55-gal POC - 12" w/ Liner            | RLMPDT.001-S      | 32.9          |
| SWB Dir Ld w/o Liner                 | RLMPDT.001-S      | 168.2         |
| TDOP w/ 10 - 55-gal Drums w/ Liners  | RLMPDT.001-S      | 14.4          |
| TDOP w/ 10 - 55-gal Drums w/o Liners | RLMPDT.001-S      | 761.6         |
| <b>Emplaced Total</b>                |                   | <b>1239.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 40.33                                |
| Aluminum-based Metals/Alloys    | 0.15                                 |
| Other Metals                    | 2.13                                 |
| Other Inorganic Materials       | 8.47                                 |
| Cellulosics                     | 10.54                                |
| Rubber                          | 10.40                                |
| Plastics                        | 20.36                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.01                                 |
| Organic Matrix                  | 0.03                                 |
| Soils/gravel                    | 0.31                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 198.80                               |
| Packaging Material, Plastic     | 1.23                                 |
| Packaging Material, Cellulosics | 3.65                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.07E+00                                   |
| Am-243  | 7.22E-07                                   |
| Cs-137  | 1.77E-05                                   |
| Np-237  | 1.04E-05                                   |
| Pu-238  | 6.41E-01                                   |
| Pu-239  | 3.97E+00                                   |
| Pu-240  | 1.29E+00                                   |
| Pu-241  | 2.03E+01                                   |
| Pu-242  | 2.69E-04                                   |
| Sr-90   | 1.60E-05                                   |
| Th-229  | 4.89E-09                                   |
| Th-230  | 2.96E-10                                   |
| Th-232  | 4.11E-10                                   |
| U-233   | 2.61E-05                                   |
| U-234   | 1.83E-05                                   |
| U-235   | 4.83E-07                                   |
| U-236   | 7.66E-08                                   |
| U-238   | 3.51E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D030

## TRUCON Code(s)

125/225, 130/230

## Waste Stream Description

N/A

Waste Stream ID: **WP-RLMPURX.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                         |                                       |                 |                   |            |          |    |
|-------------|-------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | N/A                     | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                     | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                     |                   |              |
|--------------------------------------|-------------------|--------------|
| Container Type                       | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/o Liner         | RLMPURX.001-S     | 29.7         |
| TDOP w/ 10 - 55-gal Drums w/o Liners | RLMPURX.001-S     | 76.6         |
| <b>Emplaced Total</b>                |                   | <b>106.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 42.01                                |
| Aluminum-based Metals/Alloys    | 0.20                                 |
| Other Metals                    | 1.03                                 |
| Other Inorganic Materials       | 7.41                                 |
| Cellulosics                     | 6.40                                 |
| Rubber                          | 21.91                                |
| Plastics                        | 20.79                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.10                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 193.40                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.17E+00                                   |
| Am-243  | 1.09E-06                                   |
| Cs-137  | 8.08E-05                                   |
| Np-237  | 8.88E-06                                   |
| Pu-238  | 1.40E+00                                   |
| Pu-239  | 6.91E+00                                   |
| Pu-240  | 2.80E+00                                   |
| Pu-241  | 8.56E+01                                   |
| Pu-242  | 7.33E-04                                   |
| Sr-90   | 6.82E-05                                   |
| Th-229  | 2.22E-08                                   |
| Th-230  | 2.97E-10                                   |
| Th-232  | 1.85E-17                                   |
| U-233   | 7.91E-05                                   |
| U-234   | 1.70E-05                                   |
| U-235   | 1.81E-07                                   |
| U-236   | 2.49E-07                                   |
| U-238   | 2.46E-06                                   |

## Haz. Waste No(s).

D005, D006, D008,  
D009, D011

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-RLMSSC.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                         |                       |                     |                   |                                       |          |    |
|-------------|-------------------------|-----------------------|---------------------|-------------------|---------------------------------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form      | Inorganic Non-Metal | Waste Matrix Code | S5123                                 | Handling | CH |
| Source Cat. | N/A                     | Defense Determination | Defense-Related     | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                     |                       |                     |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes          |                   |             |
|---------------------------|-------------------|-------------|
| Container Type            | Ref. Waste Stream | Volume      |
| 55-gal POC - 12" w/ Liner | RLMSSC.001-S      | 64.7        |
| <b>Emplaced Total</b>     |                   | <b>64.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 49.32                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 527.40                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 137.50                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.00E+01                                   |
| Np-237  | 1.40E-05                                   |
| Pu-238  | 3.30E+00                                   |
| Pu-239  | 4.31E+01                                   |
| Pu-240  | 9.58E+00                                   |
| Pu-241  | 1.74E+02                                   |
| Pu-242  | 1.12E-03                                   |
| Th-229  | 1.83E-14                                   |
| Th-230  | 7.96E-10                                   |
| Th-232  | 1.12E-16                                   |
| U-233   | 1.32E-10                                   |
| U-234   | 4.11E-05                                   |
| U-235   | 2.70E-07                                   |
| U-236   | 1.14E-06                                   |
| U-238   | 6.08E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

122/222

## Waste Stream Description

N/A

Waste Stream ID: **WP-RLNPDT.002**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                         |                                       |                 |                   |            |          |    |
|-------------|-------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | N/A                     | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                     | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                     |                   |              |
|--------------------------------------|-------------------|--------------|
| Container Type                       | Ref. Waste Stream | Volume       |
| 55-gal Drum Dir Ld w/ Liner          | RLNPDT.002-S      | 62.4         |
| 55-gal Drum Dir Ld w/o Liner         | RLNPDT.002-S      | 267.9        |
| TDOP w/ 10 - 55-gal Drums w/ Liners  | RLNPDT.002-S      | 4.8          |
| TDOP w/ 10 - 55-gal Drums w/o Liners | RLNPDT.002-S      | 110.2        |
| <b>Emplaced Total</b>                |                   | <b>445.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 54.38                                |
| Aluminum-based Metals/Alloys    | 0.91                                 |
| Other Metals                    | 0.78                                 |
| Other Inorganic Materials       | 24.75                                |
| Cellulosics                     | 18.89                                |
| Rubber                          | 8.30                                 |
| Plastics                        | 42.29                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.05                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.24                               |
| Packaging Material, Plastic     | 5.36                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.34E+00                                   |
| Am-243  | 7.83E-06                                   |
| Cs-137  | 3.23E-06                                   |
| Np-237  | 5.99E-06                                   |
| Pu-238  | 4.50E-01                                   |
| Pu-239  | 4.52E+00                                   |
| Pu-240  | 1.08E+00                                   |
| Pu-241  | 1.65E+01                                   |
| Pu-242  | 1.88E-04                                   |
| Sr-90   | 2.22E-06                                   |
| Th-229  | 2.29E-14                                   |
| Th-230  | 5.90E-10                                   |
| Th-232  | 1.40E-10                                   |
| U-233   | 1.05E-10                                   |
| U-234   | 1.64E-05                                   |
| U-235   | 3.76E-07                                   |
| U-236   | 1.60E-07                                   |
| U-238   | 9.76E-07                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-RLNPURX.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                         |                                       |                 |                   |            |          |    |
|-------------|-------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5490      | Handling | CH |
| Source Cat. | N/A                     | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                     | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                     |                   |             |
|--------------------------------------|-------------------|-------------|
| Container Type                       | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/o Liner         | RLNPURX.001-S     | 34.3        |
| TDOP w/ 10 - 55-gal Drums w/o Liners | RLNPURX.001-S     | 4.8         |
| <b>Emplaced Total</b>                |                   | <b>39.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 52.15                                |
| Aluminum-based Metals/Alloys    | 1.02                                 |
| Other Metals                    | 0.99                                 |
| Other Inorganic Materials       | 18.19                                |
| Cellulosics                     | 5.87                                 |
| Rubber                          | 8.82                                 |
| Plastics                        | 25.11                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 141.44                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.74E+00                                   |
| Am-243  | 1.06E-06                                   |
| Cs-137  | 5.05E-05                                   |
| Np-237  | 5.41E-06                                   |
| Pu-238  | 2.56E+00                                   |
| Pu-239  | 1.05E+01                                   |
| Pu-240  | 4.10E+00                                   |
| Pu-241  | 1.70E+02                                   |
| Pu-242  | 1.28E-03                                   |
| Sr-90   | 3.23E-05                                   |
| Th-229  | 5.33E-15                                   |
| Th-230  | 5.33E-10                                   |
| Th-232  | 4.80E-17                                   |
| U-233   | 4.37E-11                                   |
| U-234   | 2.95E-05                                   |
| U-235   | 4.15E-08                                   |
| U-236   | 4.86E-07                                   |
| U-238   | 7.75E-13                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **WP-RLRFETS.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                         |                       |                       |                   |            |                                       |      |
|-------------|-------------------------|-----------------------|-----------------------|-------------------|------------|---------------------------------------|------|
| Site        | Hanford (Richland) Site | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3111      | Handling                              | CH   |
| Source Cat. | N/A                     | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006 | Activity Concentrations Decayed to CY | 2006 |
| Stream Name | N/A                     |                       |                       |                   |            |                                       |      |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes          |                   |             |
|---------------------------|-------------------|-------------|
| Container Type            | Ref. Waste Stream | Volume      |
| 55-gal POC - 12" w/ Liner | RLRFETS.001-S     | 63.4        |
| <b>Emplaced Total</b>     |                   | <b>63.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 17.90                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 527.40                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 137.50                               |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.55E+00                                   |
| Cs-137  | 3.07E-07                                   |
| Np-237  | 1.33E-05                                   |
| Pu-238  | 1.27E+00                                   |
| Pu-239  | 5.98E+01                                   |
| Pu-240  | 9.92E+00                                   |
| Pu-241  | 8.24E+01                                   |
| Pu-242  | 1.02E-03                                   |
| Sr-90   | 3.14E-08                                   |
| Th-229  | 5.55E-08                                   |
| Th-230  | 3.93E-09                                   |
| Th-232  | 1.82E-16                                   |
| U-233   | 1.18E-04                                   |
| U-234   | 9.65E-05                                   |
| U-235   | 3.04E-06                                   |
| U-236   | 1.47E-06                                   |
| U-238   | 7.73E-13                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F005

## TRUCON Code(s)

130/230

## Waste Stream Description

N/A

Waste Stream ID: **WP-RLVIPAC.001**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                         |                                       |                     |                   |            |          |    |
|-------------|-------------------------|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site | Final Waste Form                      | Uncategorized Metal | Waste Matrix Code | S5111      | Handling | CH |
| Source Cat. | N/A                     | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                     | Activity Concentrations Decayed to CY |                     |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes      |                   |             |
|-----------------------|-------------------|-------------|
| Container Type        | Ref. Waste Stream | Volume      |
| SWB Dir Ld w/o Liner  | RLVIPAC.001-S     | 28.4        |
| <b>Emplaced Total</b> |                   | <b>28.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 15.15                                |
| Aluminum-based Metals/Alloys    | 1.68                                 |
| Other Metals                    | 1.31                                 |
| Other Inorganic Materials       | 5.22                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.30E+00                                   |
| Cs-137  | 1.29E-05                                   |
| Np-237  | 1.95E-05                                   |
| Pu-238  | 1.00E+00                                   |
| Pu-239  | 6.30E+00                                   |
| Pu-240  | 1.87E+00                                   |
| Pu-241  | 1.01E+01                                   |
| Pu-242  | 5.57E-04                                   |
| Sr-90   | 1.18E-05                                   |
| U-234   | 3.39E-03                                   |
| U-235   | 8.88E-05                                   |
| U-238   | 1.70E-03                                   |

## Haz. Waste No(s).

D005, D006, D007,  
D008, D011

## TRUCON Code(s)

122/222

## Waste Stream Description

N/A

Waste Stream ID: **WP-SR2001.001.00**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                     |                       |                 |                   |                                       |          |    |
|-------------|---------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Savannah River Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5300                                 | Handling | CH |
| Source Cat. | N/A                 | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                 |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | SR2001.001.00-S   | 61.2        |
| <b>Emplaced Total</b>       |                   | <b>61.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 11.89                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.29                                 |
| Other Inorganic Materials       | 8.37                                 |
| Cellulosics                     | 7.74                                 |
| Rubber                          | 1.00                                 |
| Plastics                        | 86.03                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.21E-02                                   |
| Cs-137  | 8.38E-08                                   |
| Np-237  | 1.63E-08                                   |
| Pu-238  | 1.77E-02                                   |
| Pu-239  | 1.58E-01                                   |
| Pu-240  | 3.14E-02                                   |
| Pu-241  | 4.66E-01                                   |
| Pu-242  | 3.16E-06                                   |
| Th-229  | 2.44E-17                                   |
| Th-230  | 5.79E-12                                   |
| Th-232  | 5.75E-19                                   |
| U-233   | 1.62E-13                                   |
| U-234   | 2.56E-07                                   |
| U-235   | 7.79E-10                                   |
| U-236   | 4.66E-09                                   |
| U-238   | 2.39E-15                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

N/A



Waste Stream ID: **WP-SR2002.002.00**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                     |                                       |                 |                   |            |          |    |
|-------------|---------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5440      | Handling | CH |
| Source Cat. | N/A                 | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                 | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes            |                   |             |
|-----------------------------|-------------------|-------------|
| Container Type              | Ref. Waste Stream | Volume      |
| 55-gal Drum Dir Ld w/ Liner | SR2002.002.00-S   | 69.9        |
| <b>Emplaced Total</b>       |                   | <b>69.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 8.65                                 |
| Aluminum-based Metals/Alloys    | 0.40                                 |
| Other Metals                    | 0.32                                 |
| Other Inorganic Materials       | 6.82                                 |
| Cellulosics                     | 6.82                                 |
| Rubber                          | 1.36                                 |
| Plastics                        | 81.40                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.76E-02                                   |
| Cs-137  | 2.51E-07                                   |
| Np-237  | 5.76E-08                                   |
| Pu-238  | 6.72E-03                                   |
| Pu-239  | 1.62E-01                                   |
| Pu-240  | 3.75E-02                                   |
| Pu-241  | 9.72E-01                                   |
| Pu-242  | 5.11E-06                                   |
| Sr-90   | 2.12E-08                                   |
| Th-229  | 4.75E-07                                   |
| Th-230  | 1.40E-12                                   |
| Th-232  | 4.40E-19                                   |
| U-233   | 1.27E-03                                   |
| U-234   | 7.75E-08                                   |
| U-235   | 6.41E-10                                   |
| U-236   | 4.45E-09                                   |
| U-238   | 3.09E-15                                   |

## Haz. Waste No(s).

D008, F001, F002,  
F003, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-SR-W026-221F-HET**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                     |                       |                 |                   |                                       |          |    |
|-------------|---------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Savannah River Site | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5300                                 | Handling | CH |
| Source Cat. | N/A                 | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                 |                       |                 |                   | Activity Concentrations Decayed to CY | 2006     |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                    |              |
|-------------------------------------|--------------------|--------------|
| Container Type                      | Ref. Waste Stream  | Volume       |
| SWB w/ 4 - 55-gal Drums w/ Liners   | SR-W026-221F-HET-S | 26.5         |
| SWB w/ 4 - 55-gal Drums w/o Liners  | SR-W026-221F-HET-S | 3.8          |
| TDOP w/ 10 - 55-gal Drums w/ Liners | SR-W026-221F-HET-S | 522.1        |
| <b>Emplaced Total</b>               |                    | <b>552.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 28.88                                |
| Aluminum-based Metals/Alloys    | 0.53                                 |
| Other Metals                    | 0.24                                 |
| Other Inorganic Materials       | 5.63                                 |
| Cellulosics                     | 2.03                                 |
| Rubber                          | 7.21                                 |
| Plastics                        | 22.31                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.03                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 217.34                               |
| Packaging Material, Plastic     | 16.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.27E-01                                   |
| Am-243  | 9.56E-08                                   |
| Cm-244  | 1.44E-04                                   |
| Cs-137  | 4.48E-07                                   |
| Np-237  | 8.46E-06                                   |
| Pu-238  | 5.49E-01                                   |
| Pu-239  | 1.86E+00                                   |
| Pu-240  | 5.16E-01                                   |
| Pu-241  | 7.95E+00                                   |
| Pu-242  | 6.42E-05                                   |
| Sr-90   | 4.70E-07                                   |
| Th-229  | 6.77E-15                                   |
| Th-230  | 3.48E-09                                   |
| Th-232  | 6.31E-08                                   |
| U-233   | 7.25E-11                                   |
| U-234   | 1.95E-04                                   |
| U-235   | 2.60E-06                                   |
| U-236   | 3.06E-08                                   |
| U-238   | 1.63E-05                                   |

## Haz. Waste No(s).

D006, D007, D008, D009, D022, D028, D029, F001, F002, F003, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-SR-W026-772F-HET**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                     |                                       |                 |                   |            |          |    |
|-------------|---------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5300      | Handling | CH |
| Source Cat. | N/A                 | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                 | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                    |               |
|-------------------------------------|--------------------|---------------|
| Container Type                      | Ref. Waste Stream  | Volume        |
| SWB w/ 4 - 55-gal Drums w/ Liners   | SR-W026-772F-HET-S | 32.1          |
| TDOP w/ 10 - 55-gal Drums w/ Liners | SR-W026-772F-HET-S | 1274.1        |
| <b>Emplaced Total</b>               |                    | <b>1306.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 3.63                                 |
| Aluminum-based Metals/Alloys    | 0.31                                 |
| Other Metals                    | 0.28                                 |
| Other Inorganic Materials       | 8.26                                 |
| Cellulosics                     | 1.89                                 |
| Rubber                          | 1.33                                 |
| Plastics                        | 20.51                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 217.54                               |
| Packaging Material, Plastic     | 16.10                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.07E-02                                   |
| Am-243  | 4.98E-07                                   |
| Cm-244  | 7.17E-05                                   |
| Cs-137  | 2.86E-05                                   |
| Np-237  | 5.34E-05                                   |
| Pu-238  | 2.10E+00                                   |
| Pu-239  | 2.01E-01                                   |
| Pu-240  | 5.73E-02                                   |
| Pu-241  | 9.57E-01                                   |
| Pu-242  | 9.42E-06                                   |
| Sr-90   | 2.31E-05                                   |
| Th-229  | 9.72E-09                                   |
| Th-230  | 6.33E-09                                   |
| Th-232  | 3.03E-07                                   |
| U-233   | 5.18E-05                                   |
| U-234   | 3.58E-04                                   |
| U-235   | 7.69E-07                                   |
| U-236   | 3.40E-09                                   |
| U-238   | 5.99E-07                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D028, D029, F002, F003, F005

## TRUCON Code(s)

125/225, 154

## Waste Stream Description

N/A

Waste Stream ID: **WP-SR-W027-221F-HETA**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                     |                                       |                 |                   |            |          |    |
|-------------|---------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5440      | Handling | CH |
| Source Cat. | N/A                 | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                 | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                    |               |
|-------------------------------------|--------------------|---------------|
| Container Type                      | Ref. Waste Stream  | Volume        |
| 55-gal Drum Dir Ld w/ Liner         | SR-W027-221F-HETA- | 164.9         |
| SWB w/ 4 - 55-gal Drums w/ Liners   | SR-W027-221F-HETA- | 213.6         |
| SWB w/ 4 - 55-gal Drums w/o Liners  | SR-W027-221F-HETA- | 1.9           |
| TDOP w/ 10 - 55-gal Drums w/ Liners | SR-W027-221F-HETA- | 1700.5        |
| <b>Emplaced Total</b>               |                    | <b>2080.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 8.18                                 |
| Aluminum-based Metals/Alloys    | 0.42                                 |
| Other Metals                    | 0.07                                 |
| Other Inorganic Materials       | 3.48                                 |
| Cellulosics                     | 4.68                                 |
| Rubber                          | 3.26                                 |
| Plastics                        | 32.87                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.01                                 |
| Organic Matrix                  | 0.01                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 210.13                               |
| Packaging Material, Plastic     | 17.76                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.55E-01                                   |
| Am-243  | 2.14E-09                                   |
| Cs-137  | 2.29E-04                                   |
| Np-237  | 4.00E-06                                   |
| Pu-238  | 9.60E-02                                   |
| Pu-239  | 8.13E-01                                   |
| Pu-240  | 2.67E-01                                   |
| Pu-241  | 5.10E+00                                   |
| Pu-242  | 4.46E-05                                   |
| Sr-90   | 6.21E-08                                   |
| Th-229  | 2.35E-09                                   |
| Th-230  | 3.23E-09                                   |
| Th-232  | 4.78E-08                                   |
| U-233   | 8.33E-06                                   |
| U-234   | 1.20E-04                                   |
| U-235   | 5.94E-08                                   |
| U-236   | 2.38E-08                                   |
| U-238   | 1.04E-06                                   |

## Haz. Waste No(s).

D008, F001, F002,  
F003, F005

## TRUCON Code(s)

125/225, 154

## Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **WP-SR-W027-221H-HET**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                     |                                       |                 |                   |            |          |    |
|-------------|---------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5440      | Handling | CH |
| Source Cat. | N/A                 | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                 | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                     |                    |               |
|--------------------------------------|--------------------|---------------|
| Container Type                       | Ref. Waste Stream  | Volume        |
| SWB w/ 4 - 55-gal Drums w/ Liners    | SR-W027-221H-HET-S | 313.7         |
| TDOP w/ 10 - 55-gal Drums w/ Liners  | SR-W027-221H-HET-S | 2203.4        |
| TDOP w/ 10 - 55-gal Drums w/o Liners | SR-W027-221H-HET-S | 4.8           |
| <b>Emplaced Total</b>                |                    | <b>2521.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 8.00                                 |
| Aluminum-based Metals/Alloys    | 0.45                                 |
| Other Metals                    | 0.14                                 |
| Other Inorganic Materials       | 3.16                                 |
| Cellulosics                     | 2.45                                 |
| Rubber                          | 6.57                                 |
| Plastics                        | 23.47                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.01                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 216.88                               |
| Packaging Material, Plastic     | 16.09                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.99E-02                                   |
| Am-243  | 8.11E-06                                   |
| Cs-137  | 4.23E-06                                   |
| Np-237  | 8.24E-05                                   |
| Pu-238  | 1.51E+01                                   |
| Pu-239  | 5.17E-02                                   |
| Pu-240  | 2.03E-02                                   |
| Pu-241  | 2.02E+00                                   |
| Pu-242  | 9.72E-06                                   |
| Sr-90   | 4.22E-06                                   |
| Th-229  | 6.73E-09                                   |
| Th-230  | 4.92E-08                                   |
| Th-232  | 1.08E-06                                   |
| U-233   | 3.59E-05                                   |
| U-234   | 2.78E-03                                   |
| U-235   | 6.16E-07                                   |
| U-236   | 1.21E-09                                   |
| U-238   | 9.86E-07                                   |

## Haz. Waste No(s).

D006, D008, D009,  
D019, D022, D029,  
D039, D040, D043,  
F001, F002, F003,  
F005, U133

## TRUCON Code(s)

125/225, 154

## Waste Stream Description

N/A

Waste Stream ID: **WP-SR-W027-235F-HET**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                     |                                       |                 |                   |            |          |    |
|-------------|---------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | N/A                 | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                 | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                    |              |
|-------------------------------------|--------------------|--------------|
| Container Type                      | Ref. Waste Stream  | Volume       |
| SWB w/ 4 - 55-gal Drums w/ Liners   | SR-W027-235F-HET-S | 18.9         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | SR-W027-235F-HET-S | 282.6        |
| <b>Emplaced Total</b>               |                    | <b>301.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 15.31                                |
| Aluminum-based Metals/Alloys    | 0.22                                 |
| Other Metals                    | 0.19                                 |
| Other Inorganic Materials       | 2.81                                 |
| Cellulosics                     | 3.52                                 |
| Rubber                          | 6.47                                 |
| Plastics                        | 24.93                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 217.29                               |
| Packaging Material, Plastic     | 16.11                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.58E-02                                   |
| Am-243  | 3.70E-08                                   |
| Cs-137  | 5.33E-07                                   |
| Np-237  | 1.19E-04                                   |
| Pu-238  | 7.14E+00                                   |
| Pu-239  | 3.20E-02                                   |
| Pu-240  | 2.17E-02                                   |
| Pu-241  | 1.30E+00                                   |
| Pu-242  | 1.11E-05                                   |
| Sr-90   | 5.33E-07                                   |
| Th-229  | 2.43E-14                                   |
| Th-230  | 1.25E-08                                   |
| Th-232  | 8.33E-07                                   |
| U-233   | 5.19E-10                                   |
| U-234   | 1.40E-03                                   |
| U-235   | 2.49E-06                                   |
| U-236   | 6.43E-10                                   |
| U-238   | 2.99E-07                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D035, F002, F003

## TRUCON Code(s)

125/225, 154

## Waste Stream Description

N/A

Waste Stream ID: **WP-SR-W027-773A-HET**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                     |                                       |                 |                   |            |          |    |
|-------------|---------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | N/A                 | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                 | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                     |                    |              |
|--------------------------------------|--------------------|--------------|
| Container Type                       | Ref. Waste Stream  | Volume       |
| SWB w/ 4 - 55-gal Drums w/ Liners    | SR-W027-773A-HET-S | 3.8          |
| TDOP w/ 10 - 55-gal Drums w/ Liners  | SR-W027-773A-HET-S | 340.1        |
| TDOP w/ 10 - 55-gal Drums w/o Liners | SR-W027-773A-HET-S | 14.4         |
| <b>Emplaced Total</b>                |                    | <b>358.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 14.48                                |
| Aluminum-based Metals/Alloys    | 0.25                                 |
| Other Metals                    | 0.54                                 |
| Other Inorganic Materials       | 7.37                                 |
| Cellulosics                     | 3.81                                 |
| Rubber                          | 2.40                                 |
| Plastics                        | 15.49                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 217.63                               |
| Packaging Material, Plastic     | 15.46                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.45E-02                                   |
| Am-243  | 6.96E-04                                   |
| Cm-244  | 3.69E-02                                   |
| Cs-137  | 6.16E-05                                   |
| Np-237  | 9.53E-05                                   |
| Pu-238  | 5.15E+00                                   |
| Pu-239  | 2.52E-01                                   |
| Pu-240  | 6.16E-02                                   |
| Pu-241  | 1.24E+00                                   |
| Pu-242  | 6.62E-06                                   |
| Sr-90   | 6.16E-05                                   |
| Th-229  | 1.95E-14                                   |
| Th-230  | 8.32E-09                                   |
| Th-232  | 3.67E-07                                   |
| U-233   | 4.15E-10                                   |
| U-234   | 9.32E-04                                   |
| U-235   | 4.72E-07                                   |
| U-236   | 1.83E-09                                   |
| U-238   | 4.18E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D043, F002, F003, F004, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **WP-SR-W027-FB-PRE86-C**

## Appendix B

## TRU Waste Inventory Profile Report

|             |                     |                                       |                 |                   |            |          |    |
|-------------|---------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5300      | Handling | CH |
| Source Cat. | N/A                 | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | N/A                 | Activity Concentrations Decayed to CY |                 |                   | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Emplaced Volumes                    |                     |               |
|-------------------------------------|---------------------|---------------|
| Container Type                      | Ref. Waste Stream   | Volume        |
| 55-gal Drum Dir Ld w/ Liner         | SR-W027-FB-PRE86-C- | 175.8         |
| SWB w/ 4 - 55-gal Drums w/ Liners   | SR-W027-FB-PRE86-C- | 264.6         |
| TDOP w/ 10 - 55-gal Drums w/ Liners | SR-W027-FB-PRE86-C- | 1944.7        |
| <b>Emplaced Total</b>               |                     | <b>2385.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 9.99                                 |
| Aluminum-based Metals/Alloys    | 0.10                                 |
| Other Metals                    | 0.05                                 |
| Other Inorganic Materials       | 2.84                                 |
| Cellulosics                     | 4.18                                 |
| Rubber                          | 3.45                                 |
| Plastics                        | 30.25                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 210.56                               |
| Packaging Material, Plastic     | 17.66                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.12E-01                                   |
| Am-243  | 4.74E-08                                   |
| Cm-244  | 4.19E-05                                   |
| Cs-137  | 7.22E-08                                   |
| Np-237  | 3.21E-06                                   |
| Pu-238  | 6.71E-02                                   |
| Pu-239  | 1.39E+00                                   |
| Pu-240  | 1.87E-01                                   |
| Pu-241  | 2.93E+00                                   |
| Pu-242  | 9.24E-05                                   |
| Sr-90   | 5.85E-08                                   |
| Th-229  | 4.19E-10                                   |
| Th-230  | 1.28E-09                                   |
| Th-232  | 2.61E-08                                   |
| U-233   | 1.49E-06                                   |
| U-234   | 4.76E-05                                   |
| U-235   | 4.85E-08                                   |
| U-236   | 1.67E-08                                   |
| U-238   | 1.16E-07                                   |

## Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D018, D019, D022, D029, D039, D040, D043, F001, F002, F003, F005, U002, U151

## TRUCON Code(s)

125/225, 154

## Waste Stream Description

N/A



**ANNUAL TRANSURANIC WASTE INVENTORY REPORT – 2007**  
**APPENDIX C**  
**Potential TRU Waste**

The following waste stream profiles contain information on waste streams that cannot be shipped to WIPP at the time of this inventory update for various reasons, as stated in section 4.0 of this report. These reasons include: waste stream contents that are not allowed, radiological composition, lack of characterization information, or estimates of radiological activities that may exceed regulatory limits, to name a few. As reported in section 4.0 of this report, some of these waste streams may be treated or otherwise reworked to allow shipment to WIPP in the future.

The TRU waste sites that have reported potential TRU waste streams are:

|  |    |
|--|----|
| Argonne National Laboratory – West (currently MFC) | AW |
| Bettis Atomic Power Laboratory                     | BT |
| Framatome (Richland)                               | FR |
| Idaho National Laboratory                          | IN |
| Los Alamos National Laboratory                     | LA |
| Lawrence Berkeley Laboratory                       | LB |
| Lawrence Livermore National Laboratory             | LL |
| U.S. Army Material Command                         | MC |
| Paducah Gaseous Diffusion Plant                    | PA |
| Hanford (Richland Operations)                      | RL |
| Hanford (Office of River Protection)               | RP |
| Separations Process Research Unit                  | SP |
| Savannah River Site                                | SR |
| General Electric Vallecitos Nuclear Center         | VN |
| West Valley Demonstration Project                  | WV |

Waste Stream ID: **AW-IN-TRA-BE-01**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                                       |                     |                   |            |          |    |
|-------------|--|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Argonne National Laboratory - West                 | Final Waste Form                      | Uncategorized Metal | Waste Matrix Code | S5000      | Handling | RH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | TRA Beryllium Blocks                               | Activity Concentrations Decayed to CY |                     |                   | 2001       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |             |             |
|---------------------------|-------------|-------------|-------------|
| Container Type            | Stored      | Proj.       | Total       |
| Beryllium Reflector Block | 9.0         | 7.2         | 16.2        |
| Shim Control Cylinder     | 6.2         | 3.6         | 9.7         |
| <b>Current Form Total</b> | <b>15.2</b> | <b>10.8</b> | <b>25.9</b> |

| Final Form Volumes           |             |             |             |
|------------------------------|-------------|-------------|-------------|
| Container Type               | Stored      | Proj.       | Total       |
| RH Can w/ Remov Lid - Dir Ld | 15.1        | 10.7        | 25.8        |
| <b>Final Form Total</b>      | <b>15.1</b> | <b>10.7</b> | <b>25.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 429.00                               |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.89E-02                                   |
| Cs-137  | 6.11E+00                                   |
| Pu-238  | 2.95E-02                                   |
| Pu-239  | 5.90E-03                                   |
| Pu-240  | 1.54E-02                                   |
| Pu-241  | 1.97E+00                                   |
| Pu-242  | 3.23E-04                                   |
| Sr-90   | 1.80E+00                                   |
| U-233   | 2.15E-05                                   |
| U-234   | 5.50E-06                                   |
| U-238   | 1.88E-06                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

317

## Waste Stream Description

This waste stream consists of beryllium reflector blocks and outer shim control cylinders (OSCCs) removed from the Advanced Test Reactor (ATR) at INL.

Waste Stream ID: **AW-W018**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                       |                        |                                       |            |          |    |
|-------------|--|-----------------------|------------------------|---------------------------------------|------------|----------|----|
| Site        | Argonne National Laboratory - West                 | Final Waste Form      | Uncategorized Metal    | Waste Matrix Code                     | X7520      | Handling | RH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Likely Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SODIUM - TRU                                       |                       |                        | Activity Concentrations Decayed to CY | 1996       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| Liner - RSWF              | 0.6        | 0.0        | 0.6        |
| Liner - RSWF              | 3.4        | 0.0        | 3.4        |
| <b>Current Form Total</b> | <b>4.0</b> | <b>0.0</b> | <b>4.0</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid - Dir Ld | 4.5        | 0.0        | 4.5        |
| <b>Final Form Total</b>      | <b>4.5</b> | <b>0.0</b> | <b>4.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 2035.00                              |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 254.40                               |
| Other Inorganic Materials       | 127.20                               |
| Cellulosics                     | 127.20                               |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.45E+02                                   |
| Cs-137  | 6.71E+04                                   |
| Pu-238  | 3.61E+02                                   |
| Pu-239  | 6.41E+03                                   |
| Pu-240  | 1.08E+03                                   |
| Pu-241  | 2.67E+04                                   |
| Sr-90   | 2.74E+04                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

317

## Waste Stream Description

Sodium was used as a primary and secondary coolant for the EBR-II reactor. Waste sodium metal is a hazardous constituent of some of the TRU waste stored at the ANL-W Radioactive Scrap and Waste Facility (RSWF). The waste was generated during maintenance and operational activities. The sodium typically coats waste metal equipment, experiments, and components removed during reactor operations and maintenance activities or is contained in blanket elements. This waste will require treatment prior to disposal at WIPP. Final waste form has not been determined yet, but the sodium will be removed from the waste. Once removed, the resulting waste may not be considered TRU, especially in the case of sodium-bonded blanket fuels.

Waste Stream ID: **AW-W019**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                       |                        |                                       |            |          |    |
|-------------|--|-----------------------|------------------------|---------------------------------------|------------|----------|----|
| Site        | Argonne National Laboratory - West                 | Final Waste Form      | Uncategorized Metal    | Waste Matrix Code                     | X7520      | Handling | RH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Likely Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SODIUM POTASSIUM -NaK- TRU                         |                       |                        | Activity Concentrations Decayed to CY | 1996       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| Liner - RSWF              | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b> | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid - Dir Ld | 0.9        | 0.0        | 0.9        |
| <b>Final Form Total</b>      | <b>0.9</b> | <b>0.0</b> | <b>0.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 2077.60                              |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 259.70                               |
| Other Inorganic Materials       | 130.00                               |
| Cellulosics                     | 130.00                               |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.81E+02                                   |
| Cs-137  | 8.37E+04                                   |
| Pu-238  | 4.51E+02                                   |
| Pu-239  | 7.99E+03                                   |
| Pu-240  | 1.34E+03                                   |
| Pu-241  | 3.33E+04                                   |
| Sr-90   | 3.42E+04                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

317

## Waste Stream Description

Sodium potassium alloy (NaK) was used as a coolant for some components of the EBR-II Reactor. Waste NaK metal is a hazardous constituent of some transuranic wastes stored at the ANL-W Radioactive Scrap and Waste Facility (RSWF). The remote-handled NaK waste at RSWF is contained in stainless steel capsules or tubing and placed inside carbon steel waste cans which then are placed in stainless steel outer cans. The entire package is then stored in RSWF storage liners (carbon steel soil storage vaults). The NaK was generated during maintenance and operational activities. NaK waste is in canisters with TRU waste metal pieces and rods from reactor experiments. This waste will require treatment prior to disposal at WIPP. Final waste form has not been determined yet.

Waste Stream ID: **AW-W029**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                    |                       |                        |                                       |            |          |    |
|-------------|------------------------------------|-----------------------|------------------------|---------------------------------------|------------|----------|----|
| Site        | Argonne National Laboratory - West | Final Waste Form      | Uncategorized Metal    | Waste Matrix Code                     | S5111      | Handling | RH |
| Source Cat. | R&D/R&D Laboratory Waste           | Defense Determination | Likely Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | RSWF TRANSURANIC WASTE             |                       |                        | Activity Concentrations Decayed to CY | 1996       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Liner - RSWF              | 1.5         | 0.0        | 1.5         |
| Liner - RSWF              | 2.1         | 0.0        | 2.1         |
| Liner - RSWF              | 8.5         | 0.0        | 8.5         |
| <b>Current Form Total</b> | <b>12.1</b> | <b>0.0</b> | <b>12.1</b> |

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| RH Can w/ Remov Lid - Dir Ld | 12.5        | 0.0        | 12.5        |
| <b>Final Form Total</b>      | <b>12.5</b> | <b>0.0</b> | <b>12.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 126.90                               |
| Aluminum-based Metals/Alloys    | 2.40                                 |
| Other Metals                    | 266.50                               |
| Other Inorganic Materials       | 14.60                                |
| Cellulosics                     | 8.30                                 |
| Rubber                          | 0.50                                 |
| Plastics                        | 5.40                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.79E+02                                   |
| Cs-137  | 8.28E+04                                   |
| Pu-238  | 4.46E+02                                   |
| Pu-239  | 7.92E+03                                   |
| Pu-240  | 1.33E+03                                   |
| Pu-241  | 3.30E+04                                   |
| Sr-90   | 3.39E+04                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

317

## Waste Stream Description

Radioactive Scrap and Waste Facility (RSWF) Waste containers storing TRU waste from various facilities. Waste includes analytical samples, EBR-I waste and subassembly hardware.

Waste Stream ID: **AW-W048**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                       |                        |                                       |            |          |    |
|-------------|--|-----------------------|------------------------|---------------------------------------|------------|----------|----|
| Site        | Argonne National Laboratory - West                 | Final Waste Form      | Heterogeneous          | Waste Matrix Code                     | S5400      | Handling | RH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Likely Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | FCF Indirect RH-MTRU Waste                         |                       |                        | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes              |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| Canister - (MFC) o/p 45-gal Drums | 2.0        | 4.1        | 6.1        |
| Liner - RSWF                      | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>         | <b>2.2</b> | <b>4.1</b> | <b>6.3</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid - Dir Ld | 1.8        | 4.5        | 6.2        |
| <b>Final Form Total</b>      | <b>1.8</b> | <b>4.5</b> | <b>6.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 526.00                               |
| Aluminum-based Metals/Alloys    | 42.30                                |
| Other Metals                    | 472.70                               |
| Other Inorganic Materials       | 44.00                                |
| Cellulosics                     | 49.30                                |
| Rubber                          | 13.70                                |
| Plastics                        | 51.80                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 73.90                                |
| Organic Matrix                  | 0.60                                 |
| Soils/gravel                    | 2.30                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Cs-137  | 8.98E+02                                   |
| Pu-239  | 4.15E-01                                   |
| Sr-90   | 9.76E+02                                   |
| U-235   | 1.28E-04                                   |

## Haz. Waste No(s).

D006

## TRUCON Code(s)

325

## Waste Stream Description

FCF Argon cell RH-MTRU waste - rags, plastic, glass, rubber, paper, cardboard, aluminum foil, metal, brushes, copper, bolts, smears, nylon sling, insulation, o-rings, etc.

Waste Stream ID: **BT-T006**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                     |                                       |                 |                   |            |          |    |
|-------------|-------------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Bettis Atomic Power Laboratory      | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | CH |
| Source Cat. | Discarding Excess/Expired Materials | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Neutron Sources                     | Activity Concentrations Decayed to CY |                 |                   | 1967       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Shipping Assembly         | 49.1        | 0.0        | 49.1        |
| <b>Current Form Total</b> | <b>49.1</b> | <b>0.0</b> | <b>49.1</b> |

| Final Form Volumes        |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| SLB2 (5' x 5' x 8) Dir Ld | 50.9        | 0.0        | 50.9        |
| <b>Final Form Total</b>   | <b>50.9</b> | <b>0.0</b> | <b>50.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 373.00                               |
| Aluminum-based Metals/Alloys    | 0.37                                 |
| Other Metals                    | 501.00                               |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.12                                 |
| Plastics                        | 353.00                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 216.30                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 9.77E-02                                   |
| Cm-244  | 2.26E-11                                   |
| Cs-137  | 1.89E-08                                   |
| Pu-238  | 7.08E+01                                   |
| Pu-239  | 6.27E-02                                   |
| Pu-240  | 4.07E-03                                   |
| Pu-241  | 1.52E+00                                   |
| Sr-90   | 1.87E-08                                   |
| U-234   | 4.89E-03                                   |
| U-235   | 1.63E-09                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

320

## Waste Stream Description

Neutron sources--(current form Source Capsule)



Waste Stream ID: **FR-MOX-MT02**

## Appendix C

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                                       |            |          |    |
|-------------|---|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Framatome   | Final Waste Form      | Heterogeneous         | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Remediation/D&D Waste   | Defense Determination | Pending Determination | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Framatome MOX Fuel Plant D&D TRU Heterogeneous Mixed Debris Waste |                       |                       | Activity Concentrations Decayed to CY | 1986       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                     |            |            |            |
|--|------------|------------|------------|
| Container Type                           | Stored     | Proj.      | Total      |
| 85-gal Drum w/ 1 - 55-gal Drum w/o Liner | 0.6        | 0.0        | 0.6        |
| <b>Current Form Total</b>                | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b>     | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 305.00                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 56.00                                |
| Rubber                          | 21.00                                |
| Plastics                        | 4.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.43E-06                                   |
| Pu-238  | 1.48E-06                                   |
| Pu-239  | 7.20E-07                                   |
| Pu-240  | 4.30E-07                                   |
| Pu-241  | 6.07E-05                                   |
| Pu-242  | 1.00E-08                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

125/225

## Waste Stream Description

This waste is from the D&D of a Mixed Oxide fuel fabrication plant. Wastes consist of discarded equipment (motors, grinders, scales, etc.) and decontamination wastes (rags, protective clothing, sweeps, etc.) from the D&D of the facility. The 6 M container includes 85 mixed oxide pellets.

Waste Stream ID: **FR-MOX-T01**

## Appendix C

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                                       |            |          |    |
|-------------|---|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Framatome   | Final Waste Form      | Heterogeneous         | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | Remediation/D&D Waste                                       | Defense Determination | Pending Determination | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Framatome MOX Fuel Plant D&D TRU Heterogeneous Debris Waste |                       |                       | Activity Concentrations Decayed to CY | 1986       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                     |            |            |            |
|--|------------|------------|------------|
| Container Type                           | Stored     | Proj.      | Total      |
| 85-gal Drum w/ 1 - 55-gal Drum w/o Liner | 8.4        | 0.0        | 8.4        |
| 85-gal Drum w/ Dot 6-M                   | 0.3        | 0.0        | 0.3        |
| <b>Current Form Total</b>                | <b>8.7</b> | <b>0.0</b> | <b>8.7</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 5.6        | 0.0        | 5.6        |
| <b>Final Form Total</b>     | <b>5.6</b> | <b>0.0</b> | <b>5.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 305.00                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 56.00                                |
| Rubber                          | 21.00                                |
| Plastics                        | 4.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.43E-06                                   |
| Pu-238  | 1.48E-06                                   |
| Pu-239  | 7.20E-07                                   |
| Pu-240  | 4.30E-07                                   |
| Pu-241  | 6.07E-05                                   |
| Pu-242  | 1.00E-08                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

This waste is from the D&D of a Mixed Oxide fuel fabrication plant. Wastes consist of discarded equipment (motors, grinders, scales, etc.) and decontamination wastes (rags, protective clothing, sweeps, etc.) from the D&D of the facility. The 6 M container includes 85 mixed oxide pellets.

Waste Stream ID: **IN-ID-RTC-S5000**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                                      | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | RH |
| Source Cat. | Remediation/D&D Waste  | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | RH TRU Debris waste from Reactor Technology Complex at THE INL |                       |                 | Activity Concentrations Decayed to CY | 2009       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |              |              |
|-----------------------------|------------|--------------|--------------|
| Container Type              | Stored     | Proj.        | Total        |
| 55-gal Drum Dir Ld w/ Liner | 0.0        | 104.0        | 104.0        |
| <b>Current Form Total</b>   | <b>0.0</b> | <b>104.0</b> | <b>104.0</b> |

| Final Form Volumes                          |            |              |              |
|---|------------|--------------|--------------|
| Container Type                              | Stored     | Proj.        | Total        |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 0.0        | 148.6        | 148.6        |
| <b>Final Form Total</b>                     | <b>0.0</b> | <b>148.6</b> | <b>148.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, F002, F005, U134

No TRUCON Codes Provided

## Waste Stream Description

This is new waste stream and was never reported in TWBIR. AK report is being prepared to assure that the newly generated waste stream meets WIPP requirements. The waste is planned to be packaged in future (2009-2010). Approximately 500 drums (55 gallon) will be generated from this waste stream.

Waste Stream ID: **IN-SBW-01A**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                       |                       |                                       |            |          |    |
|-------------|--|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                              | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3100      | Handling | RH |
| Source Cat. | Materials Production/Recovery Effluents                | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SBW Treatment - Steam Reforming - Carbonate Waste Form |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |               |            |               |
|---------------------------|---------------|------------|---------------|
| Container Type            | Stored        | Proj.      | Total         |
| Tank(s)                   | 3520.0        | 0.0        | 3520.0        |
| <b>Current Form Total</b> | <b>3520.0</b> | <b>0.0</b> | <b>3520.0</b> |

| Final Form Volumes           |              |            |              |
|------------------------------|--------------|------------|--------------|
| Container Type               | Stored       | Proj.      | Total        |
| RH Can w/ Remov Lid - Dir Ld | 534.0        | 0.0        | 534.0        |
| <b>Final Form Total</b>      | <b>534.0</b> | <b>0.0</b> | <b>534.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1360.00                              |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.52E-01                                   |
| Am-243  | 1.74E-04                                   |
| Cm-244  | 1.59E-02                                   |
| Cs-137  | 4.62E+02                                   |
| Np-237  | 1.64E-02                                   |
| Pu-238  | 7.00E+00                                   |
| Pu-239  | 9.71E-01                                   |
| Pu-240  | 1.05E-01                                   |
| Pu-241  | 5.16E+00                                   |
| Pu-242  | 8.18E-05                                   |
| Pu-244  | 1.17E-12                                   |
| Sr-90   | 2.70E+02                                   |
| Th-230  | 8.70E-06                                   |
| U-233   | 6.69E-07                                   |
| U-234   | 1.04E-02                                   |
| U-235   | 5.50E-04                                   |
| U-236   | 5.55E-05                                   |
| U-238   | 2.14E-04                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F005, U134

No TRUCON Codes Provided

## Waste Stream Description

The liquid SBW would be transferred from the storage tanks to the steam reforming process over a 1.0-year period. The steam reforming process is a fluidized bed reactor that converts the metals dissolved in the nitric acid into a dry granular powder. The fluidized bed operates at temperature between 600 and 1000 degrees centigrade. The carbonate waste form would be removed from the fluidized bed and transferred to the canning facility and placed by 90% loading in to 72-B canisters (direct loaded). The carbonate waste form would be RH-TRU waste, dried to 1% moisture, and would generate approximately 600 canisters with a surface dose rate <100 Rem/hr.

Waste Stream ID: **IN-SBW-01B**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                          | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | RH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SBW Treatment - Steam Reforming Process - Debris   |                       |                 | Activity Concentrations Decayed to CY | 2010       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |            |             |             |
|------------------------------|------------|-------------|-------------|
| Container Type               | Stored     | Proj.       | Total       |
| RH Can w/ Remov Lid - Dir Ld | 0.0        | 89.0        | 89.0        |
| <b>Current Form Total</b>    | <b>0.0</b> | <b>89.0</b> | <b>89.0</b> |

| Final Form Volumes           |            |             |             |
|------------------------------|------------|-------------|-------------|
| Container Type               | Stored     | Proj.       | Total       |
| RH Can w/ Remov Lid - Dir Ld | 0.0        | 89.0        | 89.0        |
| <b>Final Form Total</b>      | <b>0.0</b> | <b>89.0</b> | <b>89.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 700.00                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 2.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.52E-03                                   |
| Am-243  | 8.04E-07                                   |
| Cm-244  | 1.59E-04                                   |
| Cs-137  | 4.62E+00                                   |
| Np-237  | 1.64E-04                                   |
| Pu-238  | 7.00E-02                                   |
| Pu-239  | 9.71E-03                                   |
| Pu-240  | 1.05E-03                                   |
| Pu-241  | 5.16E-02                                   |
| Pu-242  | 8.18E-07                                   |
| Pu-244  | 2.00E-14                                   |
| Sr-90   | 8.70E+00                                   |
| Th-230  | 8.70E-08                                   |
| U-233   | 6.69E-09                                   |
| U-234   | 1.04E-04                                   |
| U-235   | 5.50E-06                                   |
| U-236   | 5.55E-06                                   |
| U-238   | 2.14E-06                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F005, U134

No TRUCON Codes Provided

## Waste Stream Description

The debris from the steam reforming process would include spent HEPA filters and other failed equipment.

Waste Stream ID: **IN-W146.699**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                           |                                       |                       |                   |            |          |    |
|-------------|---------------------------|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3120      | Handling | CH |
| Source Cat. | Remediation/D&D Waste     | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | TRU HEAVY METAL SLUDGE    | Activity Concentrations Decayed to CY |                       |                   | 1989       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.1        | 0.0        | 2.1        |
| <b>Current Form Total</b>   | <b>2.1</b> | <b>0.0</b> | <b>2.1</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.3        | 0.0        | 2.3        |
| <b>Final Form Total</b>     | <b>2.3</b> | <b>0.0</b> | <b>2.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 394.20                               |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 399.00                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 3.24E-01                                   |
| Cm-244  | 4.06E-01                                   |
| Cs-137  | 3.07E+01                                   |
| Pu-238  | 3.70E-01                                   |
| Pu-239  | 3.03E-01                                   |
| Sr-90   | 4.18E+01                                   |

## Haz. Waste No(s).

D006, D007, D008,  
D009, D011**No TRUCON  
Codes Provided**

## Waste Stream Description

The waste stream was sludge generated from four catch tanks that were removed from service. The sludge was generated from activity in the TRA Hot Cell and the TRA Chemistry Laboratories. This was generated only "one time."

Waste Stream ID: **IN-W159.1072**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                       |                       |                                       |            |          |    |
|-------------|--|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                    | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3125      | Handling | CH |
| Source Cat. | Pollution Control or Waste Treatment Process | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | EVAPORATOR AND DISSOLVER SLUDGE:Direct Ship  |                       |                       | Activity Concentrations Decayed to CY | 1989       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.8        | 0.0        | 0.8        |
| <b>Current Form Total</b>   | <b>0.8</b> | <b>0.0</b> | <b>0.8</b> |

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| SWB Dir Ld w/ Liner     | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b> | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 1.20                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 0.00E+00                                   |
| Pu-238  | 7.88E+02                                   |
| Pu-239  | 5.85E+00                                   |
| Pu-240  | 0.00E+00                                   |
| Pu-241  | 0.00E+00                                   |
| Pu-242  | 0.00E+00                                   |

## Haz. Waste No(s).

D001, D009

No TRUCON Codes Provided

## Waste Stream Description

This waste stream, generated at Mound Laboratory, consists of dry evaporator and dissolver sludge and insoluble residue. The consistency ranges from powder to sand-like particles. Limited amounts of other noncombustible wastes including Content Codes 803, 805, 810, 813, 814, 826, and 832 may be included. A few containers may have limited amounts of beryllium-contaminated wastes including glass, paper, gloves, and sample precipitates.

There is a potential for and lack of information on fines. In addition the drums may contain free liquids. The expected organic content in the drums is less than 14lb/ft<sup>3</sup>. No explosive, pyrophoric, or corrosive materials should be in the waste.

After removal from the bottom of dissolver pots, the dried sludge is rinsed with nitric acid and dried on a hotplate. Dried sludges are packaged in 1/2-gallon metal cans and sealed in a PE bag, or else packed in 1/2-gallon plastic-coated cardboard cartons and sealed in a PE bag. Each container is assayed and placed in PVC or PE sleeve bags. Sleeve bags can hold up to 5 containers per bag. Up to 8 sleeve bags are placed in each prepared 55-gallon drum. Drums are prepared according to post-1972 procedures, with plywood spacers as needed between on top of the rigid drum liner lid.

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: **IN-W325.1076**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                 |                       |                 |                   |                                       |          |    |
|-------------|---------------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory       | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S9000                                 | Handling | CH |
| Source Cat. | Source Information Not Compiled | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | Cert-repack                     |                       |                 |                   | Activity Concentrations Decayed to CY | 1989     |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b>     | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.30                                 |
| Other Inorganic Materials       | 11.10                                |
| Cellulosics                     | 63.00                                |
| Rubber                          | 19.30                                |
| Plastics                        | 191.80                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-238  | 3.23E+01                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

There is no content information for this waste stream, which was generated at Mound Laboratory.



Waste Stream ID: **IN-W325.679**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                 |                       |                 |                   |                                       |          |    |
|-------------|---------------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Idaho National Laboratory       | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S9000                                 | Handling | CH |
| Source Cat. | Source Information Not Compiled | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | Direct Ship                     |                       |                 |                   | Activity Concentrations Decayed to CY | 1989     |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes                |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner       | 0.2        | 0.0        | 0.2        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 5.7        | 0.0        | 5.7        |
| <b>Final Form Total</b>           | <b>5.9</b> | <b>0.0</b> | <b>5.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.17                                 |
| Other Inorganic Materials       | 6.44                                 |
| Cellulosics                     | 36.55                                |
| Rubber                          | 11.20                                |
| Plastics                        | 111.27                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 208.26                               |
| Packaging Material, Plastic     | 17.03                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-238  | 3.23E+01                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

There is no content information for this waste stream, which was generated at Mound Laboratory.

Waste Stream ID: **IN-W341.671**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                            | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5440      | Handling | CH |
| Source Cat. | Source Information Not Compiled                      | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | ANL-W HFEF ANALYTICAL CHEMISTRY AND META:Cert-repack |                       |                 | Activity Concentrations Decayed to CY | 1989       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| RH Insert                 | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b> | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>     | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-239  | 9.39E+00                                   |
| U-235   | 1.33E-03                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This wastestream, which was generated at ANL-W was generated during analytical chemistry and metallography operations. Item Description Code (IDC) 153 was replaced by IDC 160, ANL-W HFEF Analytical Chemistry and Metallographic Combsutibles. The waste package contains lead as shielding.

Waste Stream ID: **IN-W341.954**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory                            | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5440      | Handling | CH |
| Source Cat. | Source Information Not Compiled                      | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | ANL-W HFEF ANALYTICAL CHEMISTRY AND META:Direct Ship |                       |                 | Activity Concentrations Decayed to CY | 1989       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| RH Insert                 | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b> | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes                |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>           | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 211.10                               |
| Packaging Material, Plastic     | 16.30                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-239  | 3.10E+00                                   |
| U-235   | 4.38E-04                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This wastestream, which was generated at ANL-W was generated during analytical chemistry and metallography operations. Item Description Code (IDC) 153 was replaced by IDC 160, ANL-W HFEF Analytical Chemistry and Metallographic Combsutibles. The waste package contains lead as shielding.

Waste Stream ID: **IN-W350.650**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                     |                       |                 |                                       |            |          |    |
|-------------|-------------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory           | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S9000      | Handling | CH |
| Source Cat. | Source Information Not Compiled     | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SPECIAL SOURCE MATERIAL:Direct Ship |                       |                 | Activity Concentrations Decayed to CY | 1989       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>     | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-239  | 5.74E+01                                   |
| Pu-240  | 1.76E+02                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

There is no descriptive or constituent information available for this waste, which was generated at ANL-E.

Waste Stream ID: **IN-W350.923**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                      |                       |                 |                                       |            |          |    |
|-------------|--------------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory            | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S9000      | Handling | CH |
| Source Cat. | Source Information Not Compiled      | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SPECIAL SOURCE MATERIAL: Cert-repack |                       |                 | Activity Concentrations Decayed to CY | 1989       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>     | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-239  | 5.74E+01                                   |
| Pu-240  | 1.76E+02                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

There is no descriptive or constituent information available for this waste, which was generated at ANL-E.

Waste Stream ID: **IN-W353.859**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                  |                       |                       |                                       |            |          |    |
|-------------|----------------------------------|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory        | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3113      | Handling | CH |
| Source Cat. | Source Information Not Compiled  | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | SOLIDIFIED SOLUTIONS:Direct Ship |                       |                       | Activity Concentrations Decayed to CY | 1989       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| SWB Dir Ld w/ Liner     | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b> | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 1.20                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Np-237  | 3.33E-04                                   |
| Pu-239  | 1.20E-01                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream is from Bettis Atomic Power Laboratory. It consists of a single drum of TRU. No more information is available, but the waste is thought to be solidified inorganic solutions.

Waste Stream ID: **IN-W359.853**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                 |                                       |                     |                   |            |          |    |
|-------------|---------------------------------|---------------------------------------|---------------------|-------------------|------------|----------|----|
| Site        | Idaho National Laboratory       | Final Waste Form                      | Uncategorized Metal | Waste Matrix Code | S9000      | Handling | CH |
| Source Cat. | Source Information Not Compiled | Defense Determination                 | Defense-Related     | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | NEUTRON SOURCES                 | Activity Concentrations Decayed to CY |                     |                   | 1989       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Current Form Total</b>   | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.8        | 0.0        | 0.8        |
| <b>Final Form Total</b>     | <b>0.8</b> | <b>0.0</b> | <b>0.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-238  | 1.41E+02                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

111/211

## Waste Stream Description

There is no descriptive or constituent information available for this waste, which was generated at Bettis Atomic Power Laboratory.

Waste Stream ID: **IN-W360.852**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                      |                       |                     |                                       |            |          |    |
|-------------|--------------------------------------|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory            | Final Waste Form      | Uncategorized Metal | Waste Matrix Code                     | S9000      | Handling | CH |
| Source Cat. | Source Information Not Compiled      | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | MISCELLANEOUS SOURCES:RH Direct Ship |                       |                     | Activity Concentrations Decayed to CY | 1989       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>     | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

There is no descriptive or constituent information available for this waste, which was generated at Bettis Atomic Power Laboratory.



Waste Stream ID: **IN-W360.912**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                   |                       |                     |                                       |            |          |    |
|-------------|-----------------------------------|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Idaho National Laboratory         | Final Waste Form      | Uncategorized Metal | Waste Matrix Code                     | S9000      | Handling | CH |
| Source Cat. | Source Information Not Compiled   | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | MISCELLANEOUS SOURCES:Cert-repack |                       |                     | Activity Concentrations Decayed to CY | 1989       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>   | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>     | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

There is no descriptive or constituent information available for this waste, which was generated at Bettis Atomic Power Laboratory.

Waste Stream ID: LA-LA238HOR

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                       |                       |                                       |            |          |    |
|-------------|--|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3120      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Pu-238 Homogeneous, Hazardous                      |                       |                       | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.8        | 7.9        | 8.7        |
| <b>Current Form Total</b>   | <b>0.8</b> | <b>7.9</b> | <b>8.7</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.8        | 7.9        | 8.7        |
| <b>Final Form Total</b>     | <b>0.8</b> | <b>7.9</b> | <b>8.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.03                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 4.77                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.88E-02                                   |
| Pu-238  | 2.18E+02                                   |
| Pu-239  | 1.31E-01                                   |
| Pu-240  | 6.67E-02                                   |
| Pu-241  | 4.89E+00                                   |
| Pu-242  | 5.36E-05                                   |

## Haz. Waste No(s).

D005, D006, D007,  
D008, D009, D010,  
D011

## TRUCON Code(s)

111/211

## Waste Stream Description

Pu-238 Homogeneous, Hazardous

Waste Stream ID: LA-TA-03-17

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory                     | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Hepa Filters                                       | Activity Concentrations Decayed to CY |                 |                   | 1972       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 1.0         | 0.0        | 1.0         |
| Box - Crate                 | 19.2        | 0.0        | 19.2        |
| <b>Current Form Total</b>   | <b>20.2</b> | <b>0.0</b> | <b>20.2</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 1.0         | 0.0        | 1.0         |
| SWB Dir Ld w/ Liner         | 20.8        | 0.0        | 20.8        |
| <b>Final Form Total</b>     | <b>21.8</b> | <b>0.0</b> | <b>21.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 90.43                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 30.09                                |
| Other Inorganic Materials       | 145.73                               |
| Cellulosics                     | 116.97                               |
| Rubber                          | 11.83                                |
| Plastics                        | 344.25                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 152.42                               |
| Packaging Material, Plastic     | 2.91                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 0.00E+00                                   |
| Pu-238  | 0.00E+00                                   |
| Pu-239  | 0.00E+00                                   |
| U-235   | 0.00E+00                                   |
| U-238   | 0.00E+00                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Hepa Filters

Waste Stream ID: LA-TA-55-52

## Appendix C

## TRU Waste Inventory Profile Report

|             |   |                       |                        |                                       |            |          |    |
|-------------|---|-----------------------|------------------------|---------------------------------------|------------|----------|----|
| Site        | Los Alamos National Laboratory  | Final Waste Form      | Solidified Organics    | Waste Matrix Code                     | S3200      | Handling | CH |
| Source Cat. | Remediation/D&D Waste   | Defense Determination | Likely Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Oil on vermiculite, corrosive waste not for disposal at WIPP (mixed). |                       |                        | Activity Concentrations Decayed to CY | 1998       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Current Form Total</b>   | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b>     | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.18                                 |
| Aluminum-based Metals/Alloys    | 0.18                                 |
| Other Metals                    | 0.18                                 |
| Other Inorganic Materials       | 0.18                                 |
| Cellulosics                     | 0.18                                 |
| Rubber                          | 0.18                                 |
| Plastics                        | 0.18                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 165.82                               |
| Organic Matrix                  | 828.39                               |
| Soils/gravel                    | 110.61                               |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.02E+00                                   |
| Pu-238  | 5.98E+01                                   |
| Pu-239  | 7.18E+00                                   |
| Pu-240  | 2.14E+00                                   |
| Pu-241  | 3.80E+01                                   |
| Pu-242  | 2.52E-04                                   |
| U-235   | 4.42E-05                                   |
| U-238   | 3.69E-06                                   |

## Haz. Waste No(s).

D019

## TRUCON Code(s)

112/212

## Waste Stream Description

Solidified Organic Oil on vermiculite, corrosive waste not for disposal at WIPP (mixed).

Waste Stream ID: **LB-T002**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                              |                       |                 |                                       |            |          |    |
|-------------|------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Lawrence Berkeley Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste     | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | LBL - Waste                  |                       |                 | Activity Concentrations Decayed to CY | 1992       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| 12.2-gal Drum             | 0.2        | 0.0        | 0.2        |
| 2.5-gal Drum              | 0.0        | 0.0        | 0.0        |
| 30-gal Drum               | 0.1        | 0.0        | 0.1        |
| 5-gal Drum                | 0.3        | 0.0        | 0.3        |
| <b>Current Form Total</b> | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b>     | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1.38                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 5.89                                 |
| Other Inorganic Materials       | 23.40                                |
| Cellulosics                     | 7.90                                 |
| Rubber                          | 0.03                                 |
| Plastics                        | 6.60                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.70E-01                                   |
| Am-243  | 2.60E-04                                   |
| Cm-244  | 1.70E-03                                   |
| Cs-137  | 5.00E-09                                   |
| Np-237  | 4.00E-03                                   |
| Pu-238  | 7.10E-03                                   |
| Pu-239  | 5.50E-02                                   |
| Pu-240  | 9.00E-05                                   |
| Pu-241  | 3.60E-02                                   |
| U-235   | 4.10E-07                                   |

## Haz. Waste No(s).

D005, D006, D007,  
D008, D009, D010,  
D011, D018, D022,  
D028, D035, D039,  
F003, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

Heterogeneous transuranic mixed waste

Waste Stream ID: LL-T001

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Lawrence Livermore National Laboratory | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5400      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste               | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | R&D Glovebox Waste (Form 1)            |                       |                 | Activity Concentrations Decayed to CY | N/A        |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |            |              |              |
|------------------------------|------------|--------------|--------------|
| Container Type               | Stored     | Proj.        | Total        |
| 55-gal Drum Dir Ld w/o Liner | 0.0        | 229.2        | 229.2        |
| 55-gal POC - 12" w/o Liner   | 0.0        | 4.0          | 4.0          |
| SWB Dir Ld w/o Liner         | 0.0        | 35.9         | 35.9         |
| <b>Current Form Total</b>    | <b>0.0</b> | <b>269.1</b> | <b>269.1</b> |

| Final Form Volumes           |            |              |              |
|------------------------------|------------|--------------|--------------|
| Container Type               | Stored     | Proj.        | Total        |
| 55-gal Drum Dir Ld w/o Liner | 0.0        | 229.2        | 229.2        |
| 55-gal POC - 12" w/o Liner   | 0.0        | 4.0          | 4.0          |
| SWB Dir Ld w/o Liner         | 0.0        | 35.9         | 35.9         |
| <b>Final Form Total</b>      | <b>0.0</b> | <b>269.1</b> | <b>269.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 139.65                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 2.02                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

Specific waste items in this waste stream may include paper cartons, cardboard, Kimwipes, cotton swabs, tissues, cheesecloth, grinding paper, plastic (e.g., bags, sheet, tape, containers, pipette tips, and glovebox windows), Neoprene and Hypalon gloves (non-lead), aluminum foil, tin cans, hardware (e.g., nuts, bolts, washers, fittings, gauges, fixtures, thermocouples), metal tools (e.g., screwdrivers and pliers), metal parts, equipment (without circuit boards), copper (wire, tubing, flanges, rods, and molds), sealed sources, aerosol cans, glass (e.g., beakers, vials, and ion exchange columns with resin), graphite molds, crucibles (magnesium oxide, tantalum), epoxy resin chunks, and small quantities of pyrochemical salts and solidified aqueous or organic liquids (individual drums contain less than 50 percent, by volume, solidified liquids, and/or salts).

Comprehensive Inventory Database ver. 1.00

Data ver. D.6.06

NOTE: Actual numerical values have been rounded for presentation purposes.

Waste Stream ID: LL-T003

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Lawrence Livermore National Laboratory             | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5100      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste                           | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Combined metal scrap & incidental combust (Form 3) |                       |                 | Activity Concentrations Decayed to CY | N/A        |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |              |              |
|---------------------------|------------|--------------|--------------|
| Container Type            | Stored     | Proj.        | Total        |
| SLB2 (5' x 5' x 8) Dir Ld | 0.0        | 283.0        | 283.0        |
| SWB Dir Ld w/o Liner      | 0.0        | 192.8        | 192.8        |
| <b>Current Form Total</b> | <b>0.0</b> | <b>475.8</b> | <b>475.8</b> |

| Final Form Volumes        |            |              |              |
|---------------------------|------------|--------------|--------------|
| Container Type            | Stored     | Proj.        | Total        |
| SLB2 (5' x 5' x 8) Dir Ld | 0.0        | 283.0        | 283.0        |
| SWB Dir Ld w/o Liner      | 0.0        | 192.8        | 192.8        |
| <b>Final Form Total</b>   | <b>0.0</b> | <b>475.8</b> | <b>475.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 190.85                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream is composed primarily of objects which, because of physical size, cannot be packaged in a 55-gallon drum. Typical objects include decommissioned gloveboxes, hoods, and large pieces of equipment (lathes, mills, etc.). The void space in boxes may be filled with other TRU waste items or with foam in plastic bags.

Waste Stream ID: MC-W002

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                     |                                       |                 |                   |            |          |    |
|-------------|-------------------------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | U.S. Army Materiel Command          | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5110      | Handling | CH |
| Source Cat. | Discarding Excess/Expired Materials | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | USAMC TRU Waste                     | Activity Concentrations Decayed to CY |                 |                   | 1995       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| 30-gal Drum               | 0.1        | 0.0        | 0.1        |
| <b>Current Form Total</b> | <b>0.1</b> | <b>0.0</b> | <b>0.1</b> |

| Final Form Volumes            |            |            |            |
|-------------------------------|------------|------------|------------|
| Container Type                | Stored     | Proj.      | Total      |
| 55-gal S100 POC - 6" w/ Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>       | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 190.00                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 320.70                               |
| Packaging Material, Plastic     | 713.00                               |
| Packaging Material, Cellulosics | 69.70                                |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.40E+00                                   |

## Haz. Waste No(s).

D003

## TRUCON Code(s)

120/220

## Waste Stream Description

Army sealed sources



Waste Stream ID: PA-A015

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                 |                       |                     |                                       |            |          |    |
|-------------|---------------------------------|-----------------------|---------------------|---------------------------------------|------------|----------|----|
| Site        | Paducah Gaseous Diffusion Plant | Final Waste Form      | Solidified Organics | Waste Matrix Code                     | S3129      | Handling | CH |
| Source Cat. | Other/Multiple Sources          | Defense Determination | Defense-Related     | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Transuranic - Solid             |                       |                     | Activity Concentrations Decayed to CY | 1989       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                            |            |            |            |
|---|------------|------------|------------|
| Container Type                                  | Stored     | Proj.      | Total      |
| 110-gal Drum w/ 1 - 85-gal Drum w/ 1 55-gal Dru | 0.8        | 0.0        | 0.8        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner         | 1.9        | 0.0        | 1.9        |
| <b>Current Form Total</b>                       | <b>2.8</b> | <b>0.0</b> | <b>2.8</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 0.00                                 |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 0.00                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.00E-02                                   |
| Np-237  | 1.80E-02                                   |
| Pu-238  | 1.60E-03                                   |
| Pu-239  | 1.90E-01                                   |
| Th-230  | 4.90E-03                                   |

## Haz. Waste No(s).

D007

## TRUCON Code(s)

112/212

## Waste Stream Description

Transuranic Waste Class C, and Transuranic Waste Basic, class C filter/White Powder

Waste Stream ID: **PA-W014**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                 |                       |                       |                                       |            |          |    |
|-------------|---------------------------------|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Paducah Gaseous Diffusion Plant | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | L1220      | Handling | CH |
| Source Cat. | Other/Multiple Sources          | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Transuranic Waste Liquid/Solids |                       |                       | Activity Concentrations Decayed to CY | 1990       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes                    |            |            |            |
|---|------------|------------|------------|
| Container Type                          | Stored     | Proj.      | Total      |
| 30-gal Drum                             | 0.3        | 0.0        | 0.3        |
| 55-gal Drum Dir Ld w/ Liner             | 0.2        | 0.0        | 0.2        |
| 5-gal Drum                              | 0.0        | 0.0        | 0.0        |
| 85-gal Drum w/ 1 - 55-gal Drum w/ Liner | 2.9        | 0.0        | 2.9        |
| <b>Current Form Total</b>               | <b>3.5</b> | <b>0.0</b> | <b>3.5</b> |

## Waste Material Parameters

| Material Parameter           | Average Density (kg/m <sup>3</sup> ) |
|------------------------------|--------------------------------------|
| Iron-based Metals/Alloys     | 0.00                                 |
| Aluminum-based Metals/Alloys | 0.00                                 |
| Other Metals                 | 0.00                                 |
| Other Inorganic Materials    | 0.00                                 |
| Cellulosics                  | 0.00                                 |
| Rubber                       | 0.00                                 |
| Plastics                     | 0.00                                 |
| Cements                      | 0.00                                 |
| Inorganic Matrix             | 0.00                                 |
| Organic Matrix               | 0.00                                 |
| Soils/gravel                 | 0.00                                 |
| Vitrified                    | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 5.70E-02                                   |
| Np-237  | 7.10E-01                                   |
| Pu-239  | 5.50E-02                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

114/214

## Waste Stream Description

Transuranic Waste Basic class C

Waste Stream ID: **RL105-09A**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                       |                       |                                       |            |          |    |
|-------------|--|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                                | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3100      | Handling | RH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste     | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | 105KE knockout pots TRU RH mixed solidified inorganics |                       |                       | Activity Concentrations Decayed to CY | 2001       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| Uncontained               | 0.4        | 0.0        | 0.4        |
| <b>Current Form Total</b> | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

| Final Form Volumes                         |            |            |            |
|--|------------|------------|------------|
| Container Type                             | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 0.9        | 0.0        | 0.9        |
| <b>Final Form Total</b>                    | <b>0.9</b> | <b>0.0</b> | <b>0.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 212.02                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 7.91                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 778.27                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.67E+03                                   |
| Cs-137  | 6.56E+04                                   |
| Pu-238  | 5.04E+02                                   |
| Pu-239  | 9.97E+02                                   |
| Pu-240  | 6.48E+02                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

311

## Waste Stream Description

The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the REACTOR FACILITY.

Waste Stream ID: **RL618-01**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                            | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | 618 - 10&11 Burial Grounds TRU Mixed Debris        |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |               |            |               |
|---------------------------|---------------|------------|---------------|
| Container Type            | Stored        | Proj.      | Total         |
| Uncontained               | 837.5         | 0.0        | 837.5         |
| Uncontained               | 8341.0        | 0.0        | 8341.0        |
| <b>Current Form Total</b> | <b>9178.5</b> | <b>0.0</b> | <b>9178.5</b> |

| Final Form Volumes          |               |            |               |
|-----------------------------|---------------|------------|---------------|
| Container Type              | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner | 829.5         | 0.0        | 829.5         |
| SWB Dir Ld w/ Liner         | 8297.1        | 0.0        | 8297.1        |
| <b>Final Form Total</b>     | <b>9126.6</b> | <b>0.0</b> | <b>9126.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 13.39                                |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 24.10                                |
| Other Inorganic Materials       | 23.22                                |
| Cellulosics                     | 1.79                                 |
| Rubber                          | 3.57                                 |
| Plastics                        | 3.57                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 8.93                                 |
| Soils/gravel                    | 8.93                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 151.44                               |
| Packaging Material, Plastic     | 4.45                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.98E-01                                   |
| Cs-137  | 3.09E+02                                   |
| Pu-238  | 2.73E-03                                   |
| Pu-239  | 1.09E+01                                   |
| Pu-240  | 1.04E+00                                   |
| Pu-241  | 8.39E-01                                   |
| Pu-242  | 6.26E-06                                   |
| Sr-90   | 2.81E+02                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

Retrieved containerized debris waste from Burial Grounds 618 - 10 and 11

Waste Stream ID: **RL618-07**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                                       |            |          |    |
|-------------|--|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                            | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | RH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | 618 - 10&11 Burial Grounds TRU RH Non-mixed Debris |                       |                 | Activity Concentrations Decayed to CY | 2006       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Uncontained               | 8.3         | 0.0        | 8.3         |
| Uncontained               | 83.2        | 0.0        | 83.2        |
| <b>Current Form Total</b> | <b>91.5</b> | <b>0.0</b> | <b>91.5</b> |

| Final Form Volumes                         |              |            |              |
|--|--------------|------------|--------------|
| Container Type                             | Stored       | Proj.      | Total        |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 130.8        | 0.0        | 130.8        |
| <b>Final Form Total</b>                    | <b>130.8</b> | <b>0.0</b> | <b>130.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 184.11                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 332.00                               |
| Other Inorganic Materials       | 356.00                               |
| Cellulosics                     | 24.55                                |
| Rubber                          | 49.10                                |
| Plastics                        | 49.10                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 122.74                               |
| Soils/gravel                    | 122.74                               |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 26.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.85E+00                                   |
| Cs-137  | 4.25E+03                                   |
| Pu-238  | 3.76E-02                                   |
| Pu-239  | 1.50E+02                                   |
| Pu-240  | 1.42E+01                                   |
| Pu-241  | 1.15E+01                                   |
| Pu-242  | 8.60E-05                                   |
| Sr-90   | 3.87E+03                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

## Waste Stream Description

Retrieved containerized debris waste from Burial Grounds 618 - 10 and 11.

Waste Stream ID: **RLCH2-08**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Hanford (Richland) Site                            | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | RH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Tank Farms TRU RH Mixed Debris                     | Activity Concentrations Decayed to CY |                 |                   | 2001       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |              |            |              |
|---------------------------|--------------|------------|--------------|
| Container Type            | Stored       | Proj.      | Total        |
| Uncontained               | 294.0        | 0.0        | 294.0        |
| <b>Current Form Total</b> | <b>294.0</b> | <b>0.0</b> | <b>294.0</b> |

| Final Form Volumes           |              |            |              |
|------------------------------|--------------|------------|--------------|
| Container Type               | Stored       | Proj.      | Total        |
| RH Can w/ Remov Lid - Dir Ld | 293.7        | 0.0        | 293.7        |
| <b>Final Form Total</b>      | <b>293.7</b> | <b>0.0</b> | <b>293.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 2.99                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 362.87                               |
| Other Inorganic Materials       | 7.16                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 44.56                                |
| Plastics                        | 12.39                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 8.20E-02                                   |
| Pu-238  | 5.30E-02                                   |
| Pu-239  | 3.77E-03                                   |
| Pu-240  | 2.93E-03                                   |
| Pu-241  | 6.26E-03                                   |
| Pu-242  | 8.41E-09                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

112/212

## Waste Stream Description

Equipment removed from waste tanks (instrument trees, pumps, circulators, agitators, heaters, sluicers, steam coils, air lances, cameras). The waste stream ranges from contaminated clothing to process equipment contaminated with RCRA constituents.

Waste Stream ID: **RLRFET-01**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                              |                       |                 |                                       |            |          |    |
|-------------|------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (Richland) Site      | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste     | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Rocky Flats TRU Mixed Debris |                       |                 | Activity Concentrations Decayed to CY | 1984       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 202.6        | 0.0        | 202.6        |
| <b>Current Form Total</b>   | <b>202.6</b> | <b>0.0</b> | <b>202.6</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 245.2        | 0.0        | 245.2        |
| <b>Final Form Total</b>     | <b>245.2</b> | <b>0.0</b> | <b>245.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 552.00                               |
| Aluminum-based Metals/Alloys    | 87.00                                |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 43.00                                |
| Cellulosics                     | 105.00                               |
| Rubber                          | 45.00                                |
| Plastics                        | 107.00                               |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 15.00                                |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 18.00                                |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.19E+00                                   |
| Cs-137  | 5.21E-03                                   |
| Pu-238  | 2.39E+00                                   |
| Pu-239  | 3.02E+01                                   |
| Pu-240  | 7.44E+00                                   |
| Pu-241  | 1.44E+02                                   |
| Pu-242  | 6.40E-04                                   |
| Sr-90   | 4.77E-03                                   |
| U-234   | 1.90E-01                                   |
| U-235   | 3.54E-04                                   |
| U-238   | 2.12E-02                                   |

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

## Waste Stream Description

N/A

Waste Stream ID: **RP-TFC001**

## Appendix C

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                                       |            |          |    |
|-------------|---|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (River Protection) Site         | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3100      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Bismuth Phosphate Process TRU Solids    |                       |                       | Activity Concentrations Decayed to CY | 2004       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |               |            |               |
|---------------------------|---------------|------------|---------------|
| Container Type            | Stored        | Proj.      | Total         |
| Tank(s)                   | 1200.0        | 0.0        | 1200.0        |
| <b>Current Form Total</b> | <b>1200.0</b> | <b>0.0</b> | <b>1200.0</b> |

| Final Form Volumes           |              |            |              |
|------------------------------|--------------|------------|--------------|
| Container Type               | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/o Liner | 438.7        | 0.0        | 438.7        |
| <b>Final Form Total</b>      | <b>438.7</b> | <b>0.0</b> | <b>438.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.60                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 7.37E-02                                   |
| Cs-137  | 6.11E-01                                   |
| Np-237  | 1.22E-05                                   |
| Pu-238  | 6.60E-03                                   |
| Pu-239  | 5.16E-01                                   |
| Pu-240  | 6.23E-02                                   |
| Pu-241  | 1.89E-01                                   |
| Pu-242  | 3.08E-06                                   |
| Sr-90   | 7.98E+00                                   |
| U-233   | 1.10E-09                                   |
| U-234   | 1.68E-03                                   |
| U-235   | 5.42E-05                                   |
| U-236   | 1.62E-05                                   |
| U-238   | 1.24E-03                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D030, D033, D034, D035, D036, D038, D039, D040, D041, D043, F001, F002, F003, F004, F005

**No TRUCON Codes Provided**

## Waste Stream Description

Solidified aqueous waste slurry



Waste Stream ID: **RP-TFC002**

## Appendix C

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                                       |            |          |    |
|-------------|---|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (River Protection) Site                                       | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3100      | Handling | RH |
| Source Cat. | Materials Production/Recovery Effluents                               | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Bismuth Phosphate Process TRU Solids mixed with Fission Product Waste |                       |                       | Activity Concentrations Decayed to CY | 2004       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |               |            |               |
|---------------------------|---------------|------------|---------------|
| Container Type            | Stored        | Proj.      | Total         |
| Tank(s)                   | 3040.0        | 0.0        | 3040.0        |
| <b>Current Form Total</b> | <b>3040.0</b> | <b>0.0</b> | <b>3040.0</b> |

| Final Form Volumes           |               |            |               |
|------------------------------|---------------|------------|---------------|
| Container Type               | Stored        | Proj.      | Total         |
| RH Can w/ Remov Lid - Dir Ld | 1918.8        | 0.0        | 1918.8        |
| <b>Final Form Total</b>      | <b>1918.8</b> | <b>0.0</b> | <b>1918.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.37                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.50E-01                                   |
| Cs-137  | 1.05E+02                                   |
| Np-237  | 1.31E-04                                   |
| Pu-238  | 6.07E-03                                   |
| Pu-239  | 3.64E-01                                   |
| Pu-240  | 4.17E-02                                   |
| Pu-241  | 1.11E-01                                   |
| Pu-242  | 9.86E-07                                   |
| Sr-90   | 2.46E+02                                   |
| U-233   | 6.57E-04                                   |
| U-234   | 1.81E-03                                   |
| U-235   | 8.00E-05                                   |
| U-236   | 2.16E-05                                   |
| U-238   | 1.83E-03                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D030, D033, D034, D035, D036, D038, D039, D040, D041, D043, F001, F002, F003, F004, F005

**No TRUCON Codes Provided**

## Waste Stream Description

Solidified aqueous waste slurry

Waste Stream ID: **RP-TFC003**

## Appendix C

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                                       |            |          |    |
|-------------|---|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (River Protection) Site                                       | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3100      | Handling | RH |
| Source Cat. | Materials Production/Recovery Effluents                               | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Bismuth Phosphate Process TRU Solids mixed with Fission Product Waste |                       |                       | Activity Concentrations Decayed to CY | 2004       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |              |            |              |
|---------------------------|--------------|------------|--------------|
| Container Type            | Stored       | Proj.      | Total        |
| Tank(s)                   | 370.0        | 0.0        | 370.0        |
| <b>Current Form Total</b> | <b>370.0</b> | <b>0.0</b> | <b>370.0</b> |

| Final Form Volumes           |              |            |              |
|------------------------------|--------------|------------|--------------|
| Container Type               | Stored       | Proj.      | Total        |
| RH Can w/ Remov Lid - Dir Ld | 258.1        | 0.0        | 258.1        |
| <b>Final Form Total</b>      | <b>258.1</b> | <b>0.0</b> | <b>258.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.37                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.36E-01                                   |
| Cs-137  | 2.15E+01                                   |
| Np-237  | 1.39E-06                                   |
| Pu-238  | 4.87E-03                                   |
| Pu-239  | 6.46E-01                                   |
| Pu-240  | 6.85E-02                                   |
| Pu-241  | 1.94E-01                                   |
| Pu-242  | 3.40E-06                                   |
| Sr-90   | 1.21E+02                                   |
| U-233   | 1.42E-09                                   |
| U-234   | 1.80E-03                                   |
| U-235   | 7.49E-05                                   |
| U-236   | 1.89E-05                                   |
| U-238   | 1.69E-03                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D030, D033, D034, D035, D036, D038, D039, D040, D041, D043, F001, F002, F003, F004, F005

**No TRUCON Codes Provided**

## Waste Stream Description

Solidified aqueous waste slurry

Waste Stream ID: **RP-W013**

## Appendix C

## TRU Waste Inventory Profile Report

|             |   |                                       |                       |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Hanford (River Protection) Site         | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3100      | Handling | RH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | PFP TRU Solids                          | Activity Concentrations Decayed to CY |                       |                   | 2004       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |              |            |              |
|---------------------------|--------------|------------|--------------|
| Container Type            | Stored       | Proj.      | Total        |
| Tank(s)                   | 270.0        | 0.0        | 270.0        |
| <b>Current Form Total</b> | <b>270.0</b> | <b>0.0</b> | <b>270.0</b> |

| Final Form Volumes           |              |            |              |
|------------------------------|--------------|------------|--------------|
| Container Type               | Stored       | Proj.      | Total        |
| RH Can w/ Remov Lid - Dir Ld | 410.3        | 0.0        | 410.3        |
| <b>Final Form Total</b>      | <b>410.3</b> | <b>0.0</b> | <b>410.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.37                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 6.05E+01                                   |
| Cs-137  | 1.95E+02                                   |
| Np-237  | 2.21E-03                                   |
| Pu-238  | 6.58E-01                                   |
| Pu-239  | 1.40E+01                                   |
| Pu-240  | 3.23E+00                                   |
| Pu-241  | 3.25E+01                                   |
| Pu-242  | 2.58E-04                                   |
| Sr-90   | 4.37E+02                                   |
| U-233   | 5.17E-03                                   |
| U-234   | 2.62E-03                                   |
| U-235   | 1.09E-04                                   |
| U-236   | 6.33E-05                                   |
| U-238   | 2.44E-03                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D030, D033, D034, D035, D036, D038, D039, D040, D041, D043, F001, F002, F003, F004, F005

**No TRUCON Codes Provided**

## Waste Stream Description

Solidified aqueous waste slurry.

Waste Stream ID: **RP-W016**

## Appendix C

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                                       |            |          |    |
|-------------|---|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (River Protection) Site         | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3100      | Handling | RH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | PUREX TRU Cladding Removal Solids       |                       |                       | Activity Concentrations Decayed to CY | 2004       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |               |            |               |
|---------------------------|---------------|------------|---------------|
| Container Type            | Stored        | Proj.      | Total         |
| Tank(s)                   | 2030.0        | 0.0        | 2030.0        |
| <b>Current Form Total</b> | <b>2030.0</b> | <b>0.0</b> | <b>2030.0</b> |

| Final Form Volumes           |               |            |               |
|------------------------------|---------------|------------|---------------|
| Container Type               | Stored        | Proj.      | Total         |
| RH Can w/ Remov Lid - Dir Ld | 1277.2        | 0.0        | 1277.2        |
| <b>Final Form Total</b>      | <b>1277.2</b> | <b>0.0</b> | <b>1277.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.37                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 4.69E-01                                   |
| Cs-137  | 5.47E+01                                   |
| Np-237  | 1.10E-05                                   |
| Pu-238  | 9.11E-02                                   |
| Pu-239  | 9.17E-01                                   |
| Pu-240  | 2.58E-01                                   |
| Pu-241  | 6.62E+00                                   |
| Pu-242  | 3.27E-05                                   |
| Sr-90   | 3.63E+01                                   |
| U-233   | 1.60E-07                                   |
| U-234   | 1.28E-02                                   |
| U-235   | 4.91E-04                                   |
| U-236   | 1.24E-03                                   |
| U-238   | 8.82E-03                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D030, D033, D034, D035, D036, D038, D039, D040, D041, D043, F001, F002, F003, F004, F005

**No TRUCON Codes Provided**

## Waste Stream Description

Solidified aqueous waste slurry

Waste Stream ID: **RP-W754**

## Appendix C

## TRU Waste Inventory Profile Report

|             |   |                                       |                       |                   |            |          |    |
|-------------|---|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | Hanford (River Protection) Site         | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3100      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination                 | Defense-Related       | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | 224 Waste                               | Activity Concentrations Decayed to CY |                       |                   | 2004       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |               |            |               |
|---------------------------|---------------|------------|---------------|
| Container Type            | Stored        | Proj.      | Total         |
| Tank(s)                   | 1079.0        | 0.0        | 1079.0        |
| <b>Current Form Total</b> | <b>1079.0</b> | <b>0.0</b> | <b>1079.0</b> |

| Final Form Volumes           |              |            |              |
|------------------------------|--------------|------------|--------------|
| Container Type               | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/o Liner | 323.2        | 0.0        | 323.2        |
| <b>Final Form Total</b>      | <b>323.2</b> | <b>0.0</b> | <b>323.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.60                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.20E-01                                   |
| Cs-137  | 1.66E-01                                   |
| Np-237  | 1.62E-06                                   |
| Pu-238  | 1.11E-02                                   |
| Pu-239  | 1.55E+00                                   |
| Pu-240  | 1.29E-01                                   |
| Pu-241  | 2.16E-01                                   |
| Pu-242  | 4.91E-06                                   |
| Sr-90   | 3.36E+00                                   |
| U-233   | 1.24E-10                                   |
| U-234   | 1.79E-04                                   |
| U-235   | 7.25E-06                                   |
| U-236   | 1.75E-06                                   |
| U-238   | 1.64E-04                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D030, D033, D034, D035, D036, D038, D039, D040, D041, D043, F001, F002, F003, F004, F005

**No TRUCON Codes Provided**

## Waste Stream Description

Solidified aqueous waste slurry.

Waste Stream ID: **RP-W755**

## Appendix C

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                                       |            |          |    |
|-------------|---|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | Hanford (River Protection) Site         | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3100      | Handling | CH |
| Source Cat. | Materials Production/Recovery Effluents | Defense Determination | Defense-Related       | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Bismuth Phosphate Process TRU Solids    |                       |                       | Activity Concentrations Decayed to CY | 2004       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |               |            |               |
|---------------------------|---------------|------------|---------------|
| Container Type            | Stored        | Proj.      | Total         |
| Tank(s)                   | 3090.0        | 0.0        | 3090.0        |
| <b>Current Form Total</b> | <b>3090.0</b> | <b>0.0</b> | <b>3090.0</b> |

| Final Form Volumes           |              |            |              |
|------------------------------|--------------|------------|--------------|
| Container Type               | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/o Liner | 793.5        | 0.0        | 793.5        |
| <b>Final Form Total</b>      | <b>793.5</b> | <b>0.0</b> | <b>793.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.60                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.41E-01                                   |
| Cs-137  | 3.32E-01                                   |
| Np-237  | 8.04E-05                                   |
| Pu-238  | 2.97E-03                                   |
| Pu-239  | 5.40E-01                                   |
| Pu-240  | 4.38E-02                                   |
| Pu-241  | 6.82E-02                                   |
| Pu-242  | 5.51E-07                                   |
| Sr-90   | 1.20E+01                                   |
| U-233   | 3.11E-09                                   |
| U-234   | 3.61E-03                                   |
| U-235   | 1.60E-04                                   |
| U-236   | 2.90E-05                                   |
| U-238   | 3.67E-03                                   |

## Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D030, D033, D034, D035, D036, D038, D039, D040, D041, D043, F001, F002, F003, F004, F005

**No TRUCON Codes Provided**

## Waste Stream Description

Solidified aqueous waste slurry

Waste Stream ID: **SP-T001**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                   |                       |                       |                   |                                       |          |    |
|-------------|-----------------------------------|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | Separations Process Research Unit | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3120                                 | Handling | CH |
| Source Cat. | R&D/R&D Laboratory Waste          | Defense Determination | Defense-Related       | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | N/A                               |                       |                       |                   | Activity Concentrations Decayed to CY | N/A      |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Tank(s)                   | 50.0        | 0.0        | 50.0        |
| <b>Current Form Total</b> | <b>50.0</b> | <b>0.0</b> | <b>50.0</b> |

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 49.9        | 0.0        | 49.9        |
| <b>Final Form Total</b>      | <b>49.9</b> | <b>0.0</b> | <b>49.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 0.00E+00                                   |
| Cs-137  | 0.00E+00                                   |
| Pu-239  | 0.00E+00                                   |
| Sr-90   | 0.00E+00                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

Separations Process Research Unit.

Waste Stream ID: **SR-T001-773A-CLAS**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                          |                       |                 |                                       |            |          |    |
|-------------|--------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Savannah River Site      | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | Other/Multiple Sources   | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | CH TRU - Waste from 773A |                       |                 | Activity Concentrations Decayed to CY | 1990       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 0.4         | 0.0        | 0.4         |
| Box - Steel                 | 28.2        | 0.0        | 28.2        |
| SWB Dir Ld w/ Liner         | 5.7         | 0.0        | 5.7         |
| <b>Current Form Total</b>   | <b>34.3</b> | <b>0.0</b> | <b>34.3</b> |

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 0.4          | 0.0        | 0.4          |
| SLB2 (5' x 5' x 8) Dir Ld   | 118.9        | 0.0        | 118.9        |
| SWB Dir Ld w/o Liner        | 5.7          | 0.0        | 5.7          |
| <b>Final Form Total</b>     | <b>124.9</b> | <b>0.0</b> | <b>124.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 129.00                               |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 32.10                                |
| Cellulosics                     | 26.70                                |
| Rubber                          | 0.00                                 |
| Plastics                        | 5.30                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 213.17                               |
| Packaging Material, Plastic     | 0.12                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## No Final Form Radionuclides Provided

## Haz. Waste No(s).

D004, D005, D006,  
D007, D008, D009,  
D010, D011, D019,  
D022, D027, D028,  
D029, D043, F002,  
F003, F004, F005

## TRUCON Code(s)

125/225

## Waste Stream Description

This waste stream is defense related, contact handled TRU waste and is composed of metal equipment and debris



Waste Stream ID: SR-T001-WSB-1

## Appendix C

## TRU Waste Inventory Profile Report

|             |                     |                                       |                 |                   |            |          |    |
|-------------|---------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site | Final Waste Form                      | Unknown         | Waste Matrix Code | N/A        | Handling | CH |
| Source Cat. | Source Unknown      | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | UNKNOWN             | Activity Concentrations Decayed to CY |                 |                   | 2015       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |               |               |
|---------------------------|------------|---------------|---------------|
| Container Type            | Stored     | Proj.         | Total         |
| SWB Dir Ld w/ Liner       | 0.0        | 4910.2        | 4910.2        |
| <b>Current Form Total</b> | <b>0.0</b> | <b>4910.2</b> | <b>4910.2</b> |

| Final Form Volumes      |            |               |               |
|-------------------------|------------|---------------|---------------|
| Container Type          | Stored     | Proj.         | Total         |
| SWB Dir Ld w/ Liner     | 0.0        | 4910.2        | 4910.2        |
| <b>Final Form Total</b> | <b>0.0</b> | <b>4910.2</b> | <b>4910.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 2300.00                              |
| Inorganic Matrix                | 720.00                               |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 153.50                               |
| Packaging Material, Plastic     | 1.20                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.99E+02                                   |
| Pu-238  | 6.77E-03                                   |
| Pu-239  | 4.44E-02                                   |
| Pu-240  | 1.69E-02                                   |
| Pu-241  | 8.17E+00                                   |
| U-234   | 1.32E-03                                   |
| U-235   | 4.25E-05                                   |
| U-236   | 6.83E-07                                   |
| U-238   | 3.84E-07                                   |

## Haz. Waste No(s).

D008, D009

No TRUCON  
Codes Provided

## Waste Stream Description

This waste stream is defense related, contact handled TRU and is a neutralized aqueous stream solidified in an inorganic matrix (cement).

Waste Stream ID: **SR-T001-WSB-3**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                     |                                       |                 |                   |            |          |    |
|-------------|---------------------|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site | Final Waste Form                      | Unknown         | Waste Matrix Code | N/A        | Handling | CH |
| Source Cat. | Source Unknown      | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | UNKNOWN             | Activity Concentrations Decayed to CY |                 |                   | 2015       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |              |              |
|-----------------------------|------------|--------------|--------------|
| Container Type              | Stored     | Proj.        | Total        |
| 55-gal Drum Dir Ld w/ Liner | 0.0        | 143.9        | 143.9        |
| <b>Current Form Total</b>   | <b>0.0</b> | <b>143.9</b> | <b>143.9</b> |

| Final Form Volumes           |            |              |              |
|------------------------------|------------|--------------|--------------|
| Container Type               | Stored     | Proj.        | Total        |
| 55-gal Drum Dir Ld w/o Liner | 0.0        | 143.9        | 143.9        |
| <b>Final Form Total</b>      | <b>0.0</b> | <b>143.9</b> | <b>143.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 250.00                               |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 2.99E+02                                   |
| Pu-238  | 6.15E-01                                   |
| Pu-239  | 4.04E+00                                   |
| Pu-240  | 1.48E+00                                   |
| Pu-241  | 7.45E+00                                   |
| U-234   | 4.51E-03                                   |
| U-235   | 1.45E-04                                   |
| U-238   | 1.31E-06                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream is defense related, contact handled TRU and is a neutralized aqueous stream in an inorganic sorbent.

Waste Stream ID: SR-W026-MFFF-1

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                       |                 |                   |                                       |          |    |
|-------------|--|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Savannah River Site                                | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5000                                 | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | UNKNOWN  |                       |                 |                   | Activity Concentrations Decayed to CY | 2015     |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |               |               |
|-----------------------------|------------|---------------|---------------|
| Container Type              | Stored     | Proj.         | Total         |
| 55-gal Drum Dir Ld w/ Liner | 0.0        | 3504.2        | 3504.2        |
| <b>Current Form Total</b>   | <b>0.0</b> | <b>3504.2</b> | <b>3504.2</b> |

| Final Form Volumes          |            |               |               |
|-----------------------------|------------|---------------|---------------|
| Container Type              | Stored     | Proj.         | Total         |
| 55-gal Drum Dir Ld w/ Liner | 0.0        | 3504.2        | 3504.2        |
| <b>Final Form Total</b>     | <b>0.0</b> | <b>3504.2</b> | <b>3504.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 3.13                                 |
| Aluminum-based Metals/Alloys    | 0.07                                 |
| Other Metals                    | 0.04                                 |
| Other Inorganic Materials       | 1.24                                 |
| Cellulosics                     | 2.20                                 |
| Rubber                          | 0.26                                 |
| Plastics                        | 15.30                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Pu-238  | 4.11E-01                                   |
| Pu-239  | 2.69E+00                                   |
| Pu-240  | 9.86E-01                                   |
| Pu-241  | 4.95E+00                                   |
| U-234   | 3.00E-06                                   |
| U-235   | 9.66E-07                                   |
| U-236   | 1.58E-08                                   |
| U-238   | 8.75E-09                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

125/225

## Waste Stream Description

This waste stream is defense related, contact handled TRU and is composed of heterogeneous debris which can include HEPA filters, plastic, protective clothing, metal, gloves, lead lined gloves and sludges.

Waste Stream ID: SR-W026-PDCF-1

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site                                | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | N/A        | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | UNKNOWN  | Activity Concentrations Decayed to CY |                 |                   | 2017       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |               |               |
|-----------------------------|------------|---------------|---------------|
| Container Type              | Stored     | Proj.         | Total         |
| 55-gal Drum Dir Ld w/ Liner | 0.0        | 2146.6        | 2146.6        |
| <b>Current Form Total</b>   | <b>0.0</b> | <b>2146.6</b> | <b>2146.6</b> |

| Final Form Volumes          |            |               |               |
|-----------------------------|------------|---------------|---------------|
| Container Type              | Stored     | Proj.         | Total         |
| 55-gal Drum Dir Ld w/ Liner | 0.0        | 2146.6        | 2146.6        |
| <b>Final Form Total</b>     | <b>0.0</b> | <b>2146.6</b> | <b>2146.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 3.13                                 |
| Aluminum-based Metals/Alloys    | 0.07                                 |
| Other Metals                    | 0.04                                 |
| Other Inorganic Materials       | 1.24                                 |
| Cellulosics                     | 2.20                                 |
| Rubber                          | 0.26                                 |
| Plastics                        | 15.30                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

Haz. Waste No(s).

D008

TRUCON Code(s)

125/225

## Waste Stream Description

This waste stream is defense related, contact handled TRU and is composed of heterogeneous debris which can include HEPA filters, plastic, protective clothing, metal ingots including beryllium, gloves, lead lined gloves and sludges.

Waste Stream ID: **SR-W026-WSB-2**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                                       |                 |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------|-------------------|------------|----------|----|
| Site        | Savannah River Site                                | Final Waste Form                      | Heterogeneous   | Waste Matrix Code | S5000      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Defense-Related | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | UNKNOWN  | Activity Concentrations Decayed to CY |                 |                   | 2015       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |              |              |
|-----------------------------|------------|--------------|--------------|
| Container Type              | Stored     | Proj.        | Total        |
| 55-gal Drum Dir Ld w/ Liner | 0.0        | 625.9        | 625.9        |
| <b>Current Form Total</b>   | <b>0.0</b> | <b>625.9</b> | <b>625.9</b> |

| Final Form Volumes          |            |              |              |
|-----------------------------|------------|--------------|--------------|
| Container Type              | Stored     | Proj.        | Total        |
| 55-gal Drum Dir Ld w/ Liner | 0.0        | 625.9        | 625.9        |
| <b>Final Form Total</b>     | <b>0.0</b> | <b>625.9</b> | <b>625.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 3.13                                 |
| Aluminum-based Metals/Alloys    | 0.07                                 |
| Other Metals                    | 0.04                                 |
| Other Inorganic Materials       | 1.24                                 |
| Cellulosics                     | 2.20                                 |
| Rubber                          | 0.26                                 |
| Plastics                        | 15.30                                |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 1.32E+02                                   |
| Pu-238  | 9.66E-06                                   |
| Pu-239  | 1.98E-01                                   |
| Pu-240  | 9.86E-02                                   |
| Pu-241  | 1.98E-01                                   |
| Pu-242  | 7.54E-06                                   |
| U-234   | 3.00E-04                                   |
| U-235   | 9.66E-06                                   |
| U-236   | 1.56E-07                                   |
| U-238   | 9.08E-08                                   |

## Haz. Waste No(s).

D008

## TRUCON Code(s)

125/225

## Waste Stream Description

This waste stream is defense related, contact handled TRU and is composed of heterogeneous debris with can include HEPA filters, plastic, protective clothing, metal, gloves, lead lined gloves, and sludges.

Waste Stream ID: **SR-W027-221H-HET-B**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                     |                       |                 |                                       |            |          |    |
|-------------|-------------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Savannah River Site                 | Final Waste Form      | Heterogeneous   | Waste Matrix Code                     | S5000      | Handling | CH |
| Source Cat. | Discarding Excess/Expired Materials | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Heterogeneous debris from 221H      |                       |                 | Activity Concentrations Decayed to CY | 2004       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 14.8        | 0.0        | 14.8        |
| <b>Current Form Total</b>   | <b>14.8</b> | <b>0.0</b> | <b>14.8</b> |

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 14.8        | 0.0        | 14.8        |
| <b>Final Form Total</b>     | <b>14.8</b> | <b>0.0</b> | <b>14.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

|                           |
|---------------------------|
| TRUCON Code(s)<br>125/225 |
|---------------------------|

## Waste Stream Description

This waste stream has been separated from its parent waste stream SR-W027-221H-HET.

Waste Stream ID: **SR-W027-HBL-Box-B**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                     |                       |                 |                   |                                       |          |    |
|-------------|-------------------------------------|-----------------------|-----------------|-------------------|---------------------------------------|----------|----|
| Site        | Savannah River Site                 | Final Waste Form      | Heterogeneous   | Waste Matrix Code | S5000                                 | Handling | CH |
| Source Cat. | Discarding Excess/Expired Materials | Defense Determination | Defense-Related | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | CH mixed TRU from 221H              |                       |                 |                   | Activity Concentrations Decayed to CY | 1990     |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |              |            |              |
|---------------------------|--------------|------------|--------------|
| Container Type            | Stored       | Proj.      | Total        |
| Box - SRS Black Box       | 128.1        | 0.0        | 128.1        |
| <b>Current Form Total</b> | <b>128.1</b> | <b>0.0</b> | <b>128.1</b> |

| Final Form Volumes        |              |            |              |
|---------------------------|--------------|------------|--------------|
| Container Type            | Stored       | Proj.      | Total        |
| SLB2 (5' x 5' x 8) Dir Ld | 101.9        | 0.0        | 101.9        |
| <b>Final Form Total</b>   | <b>101.9</b> | <b>0.0</b> | <b>101.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 216.30                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream has been separated from its parent waste stream SR-W027-HBL-Box.

Waste Stream ID: **SR-W027-SRSG-SOIL**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                    |                       |                 |                                       |            |          |    |
|-------------|------------------------------------|-----------------------|-----------------|---------------------------------------|------------|----------|----|
| Site        | Savannah River Site                | Final Waste Form      | Soils           | Waste Matrix Code                     | S4000      | Handling | CH |
| Source Cat. | Source Information Not Compiled    | Defense Determination | Defense-Related | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | CH Mixed TRU Soil / Gravel (S4000) |                       |                 | Activity Concentrations Decayed to CY | 1977       |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes        |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 3.3        | 0.0        | 3.3        |
| <b>Current Form Total</b>   | <b>3.3</b> | <b>0.0</b> | <b>3.3</b> |

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 3.3        | 0.0        | 3.3        |
| <b>Final Form Total</b>     | <b>3.3</b> | <b>0.0</b> | <b>3.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 2162.00                              |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 37.00                                |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

## Final Form Radionuclides

| Isotope | Typical Concentration (Ci/m <sup>3</sup> ) |
|---------|--|
| Am-241  | 0.00E+00                                   |
| Am-243  | 0.00E+00                                   |
| Cm-244  | 0.00E+00                                   |
| Cs-137  | 0.00E+00                                   |
| Pu-238  | 0.00E+00                                   |
| Pu-239  | 0.00E+00                                   |
| Pu-240  | 0.00E+00                                   |
| Pu-241  | 0.00E+00                                   |
| Pu-242  | 0.00E+00                                   |
| Sr-90   | 0.00E+00                                   |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

Mixed TRU Soil and Gravel from spill clean up.



Waste Stream ID: VN-CHT001

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                |                       |                       |                                       |                |            |    |
|-------------|--------------------------------|-----------------------|-----------------------|---------------------------------------|----------------|------------|----|
| Site        | GE - Vallecitos Nuclear Center | Final Waste Form      | Heterogeneous         | Waste Matrix Code                     | S5400          | Handling   | CH |
| Source Cat. | Remediation/D&D Waste          | Defense Determination | Pending Determination |                                       | Inventory Date | 12/31/2006 |    |
| Stream Name | Heterogeneous debris           |                       |                       | Activity Concentrations Decayed to CY | N/A            |            |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Hot Cell                  | 20.2        | 0.0        | 20.2        |
| <b>Current Form Total</b> | <b>20.2</b> | <b>0.0</b> | <b>20.2</b> |

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 20.2        | 0.0        | 20.2        |
| <b>Final Form Total</b>      | <b>20.2</b> | <b>0.0</b> | <b>20.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste will be generated from refurbishment of an alpha high-level hot cell.

Waste Stream ID: VN-RHT001

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                |                       |                       |                                       |                |            |    |
|-------------|--------------------------------|-----------------------|-----------------------|---------------------------------------|----------------|------------|----|
| Site        | GE - Vallecitos Nuclear Center | Final Waste Form      | Heterogeneous         | Waste Matrix Code                     | S5400          | Handling   | RH |
| Source Cat. | Remediation/D&D Waste          | Defense Determination | Pending Determination |                                       | Inventory Date | 12/31/2006 |    |
| Stream Name | Heterogeneous debris           |                       |                       | Activity Concentrations Decayed to CY | N/A            |            |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Hot Cell                  | 12.5        | 0.0        | 12.5        |
| <b>Current Form Total</b> | <b>12.5</b> | <b>0.0</b> | <b>12.5</b> |

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| RH Can w/ Remov Lid - Dir Ld | 12.5        | 0.0        | 12.5        |
| <b>Final Form Total</b>      | <b>12.5</b> | <b>0.0</b> | <b>12.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 560.60                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

The waste will be generated from the refurbishment of an alpha high-level hot cell.

Waste Stream ID: **WV-M005**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | West Valley Demonstration Project                  | Final Waste Form                      | Filter                | Waste Matrix Code | S5410      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Pending Determination | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | TRU Filters  | Activity Concentrations Decayed to CY |                       |                   | N/A        |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |              |            |              |
|---------------------------|--------------|------------|--------------|
| Container Type            | Stored       | Proj.      | Total        |
| Box - Misc                | 2.9          | 0.0        | 2.9          |
| Box - Misc                | 4.1          | 0.0        | 4.1          |
| Box - Misc                | 8.3          | 0.0        | 8.3          |
| Box - Misc                | 10.2         | 0.0        | 10.2         |
| Box - Misc                | 12.7         | 0.0        | 12.7         |
| Box - Misc                | 14.7         | 0.0        | 14.7         |
| Box - Misc                | 19.0         | 0.0        | 19.0         |
| Box - Misc                | 23.8         | 0.0        | 23.8         |
| Box - Misc                | 23.8         | 0.0        | 23.8         |
| <b>Current Form Total</b> | <b>119.4</b> | <b>0.0</b> | <b>119.4</b> |

| Final Form Volumes           |              |            |              |
|------------------------------|--------------|------------|--------------|
| Container Type               | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/o Liner | 119.8        | 0.0        | 119.8        |
| <b>Final Form Total</b>      | <b>119.8</b> | <b>0.0</b> | <b>119.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 1.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream consists of filters generated from normal site operations. The specific contents include pre-filters, High Efficiency Particulate Air (HEPA) filters, and roughing filters.

Waste Stream ID: **WV-M007**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | West Valley Demonstration Project                  | Final Waste Form                      | Unknown               | Waste Matrix Code | U9999      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Pending Determination | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | TRU General Waste                                  | Activity Concentrations Decayed to CY |                       |                   | N/A        |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 10.8        | 0.0        | 10.8        |
| <b>Current Form Total</b>    | <b>10.8</b> | <b>0.0</b> | <b>10.8</b> |

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 10.8        | 0.0        | 10.8        |
| <b>Final Form Total</b>      | <b>10.8</b> | <b>0.0</b> | <b>10.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 1.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form  
Radionuclides ProvidedHaz. Waste No(s).  
D007, D008No TRUCON  
Codes Provided

## Waste Stream Description

This waste stream consists of uncharacterized (i.e., requires hazardous characterization) general site waste generated from normal site operations. The specific contents of this waste stream are unknown.

Waste Stream ID: **WV-M008**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                       |                       |                   |                                       |          |    |
|-------------|--|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | West Valley Demonstration Project                  | Final Waste Form      | Solidified Inorganics | Waste Matrix Code | S3150                                 | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Pending Determination | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | TRU Concrete                                       |                       |                       |                   | Activity Concentrations Decayed to CY | N/A      |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 0.2        | 0.0        | 0.2        |
| <b>Current Form Total</b>    | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>      | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream consists of samples solidified with cement generated from the on-site A&PC laboratory.

Waste Stream ID: **WV-M010**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                       |                       |                                       |            |          |    |
|-------------|--|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | West Valley Demonstration Project                  | Final Waste Form      | Solidified Inorganics | Waste Matrix Code                     | S3190      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Pending Determination | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | TRU Spent Absorbents                               |                       |                       | Activity Concentrations Decayed to CY | N/A        |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 0.8        | 0.0        | 0.8        |
| <b>Current Form Total</b>    | <b>0.8</b> | <b>0.0</b> | <b>0.8</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 0.8        | 0.0        | 0.8        |
| <b>Final Form Total</b>      | <b>0.8</b> | <b>0.0</b> | <b>0.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 1.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream consists of spent absorbents generated from site operations. The media absorbed is not known for this waste stream.

Waste Stream ID: **WV-M013**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | West Valley Demonstration Project                  | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3131      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Pending Determination | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Sweeping Compound                                  | Activity Concentrations Decayed to CY |                       |                   | N/A        |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 1.9        | 0.0        | 1.9        |
| <b>Current Form Total</b>    | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>      | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 1.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

Haz. Waste No(s).  
D007, D008

No TRUCON Codes Provided

## Waste Stream Description

This waste stream consists of sweeping compound generated from normal site operations. The specific contents include grid and floor debris. This waste stream is considered as hazardous/radioactively contaminated based on the assumption that the waste contains lead and chromium contaminated paint chips.

Waste Stream ID: **WV-M015**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                     |                                       |                       |                   |            |          |    |
|-------------|-------------------------------------|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | West Valley Demonstration Project   | Final Waste Form                      | Heterogeneous         | Waste Matrix Code | S5420      | Handling | CH |
| Source Cat. | Remediation/D&D Waste               | Defense Determination                 | Pending Determination | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Chemical Process Cell General Waste | Activity Concentrations Decayed to CY |                       |                   | N/A        |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 0.6         | 0.0        | 0.6         |
| Box - Misc                   | 2.0         | 0.0        | 2.0         |
| Box - Misc                   | 10.5        | 0.0        | 10.5        |
| <b>Current Form Total</b>    | <b>13.1</b> | <b>0.0</b> | <b>13.1</b> |

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 13.1        | 0.0        | 13.1        |
| <b>Final Form Total</b>      | <b>13.1</b> | <b>0.0</b> | <b>13.1</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 1.00                                 |
| Other Inorganic Materials       | 1.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream was generated as a result of the decommissioning and decontamination of the Chemical Process Cell (CPC). The CPC was previously used to reprocess spent fuel rods. The specific contents of this container include vacuum lines, air lines, floor debris, pipe, & hoses.



Waste Stream ID: **WV-T001**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                   |                       |                       |                                       |            |          |    |
|-------------|-----------------------------------|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | West Valley Demonstration Project | Final Waste Form      | Heterogeneous         | Waste Matrix Code                     | S5490      | Handling | CH |
| Source Cat. | Remediation/D&D Waste             | Defense Determination | Pending Determination | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Fissile Material - Solids         |                       |                       | Activity Concentrations Decayed to CY | N/A        |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 8.1         | 0.0        | 8.1         |
| Box - Misc                   | 15.3        | 0.0        | 15.3        |
| Box - Misc                   | 15.8        | 0.0        | 15.8        |
| <b>Current Form Total</b>    | <b>39.3</b> | <b>0.0</b> | <b>39.3</b> |

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 31.2        | 0.0        | 31.2        |
| <b>Final Form Total</b>      | <b>31.2</b> | <b>0.0</b> | <b>31.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 1.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream consists of solid fissile material generated from previous decontamination and decommissioning activities. The specific contents include CUNO filters, vacuum cans, glove box debris, piping, hoses, pumps, etc

Waste Stream ID: **WV-T004**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                   |                                       |                       |                   |            |          |    |
|-------------|-----------------------------------|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | West Valley Demonstration Project | Final Waste Form                      | Unknown               | Waste Matrix Code | U9999      | Handling | CH |
| Source Cat. | Remediation/D&D Waste             | Defense Determination                 | Pending Determination | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Fissile Material - Other          | Activity Concentrations Decayed to CY |                       |                   | N/A        |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 0.6        | 0.0        | 0.6        |
| <b>Current Form Total</b>    | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b>      | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 1.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream consists of liquid waste with associated fissile material generated from previous decontamination and decommissioning activities. The specific contents are unknown.

Waste Stream ID: **WV-T006**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                       |                       |                   |                                       |          |    |
|-------------|--|-----------------------|-----------------------|-------------------|---------------------------------------|----------|----|
| Site        | West Valley Demonstration Project                  | Final Waste Form      | Heterogeneous         | Waste Matrix Code | S5490                                 | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination | Pending Determination | Inventory Date    | 12/31/2006                            |          |    |
| Stream Name | TRU General Waste                                  |                       |                       |                   | Activity Concentrations Decayed to CY | N/A      |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |             |             |             |
|------------------------------|-------------|-------------|-------------|
| Container Type               | Stored      | Proj.       | Total       |
| 55-gal Drum Dir Ld w/o Liner | 10.4        | 10.2        | 20.6        |
| <b>Current Form Total</b>    | <b>10.4</b> | <b>10.2</b> | <b>20.6</b> |

| Final Form Volumes           |             |             |             |
|------------------------------|-------------|-------------|-------------|
| Container Type               | Stored      | Proj.       | Total       |
| 55-gal Drum Dir Ld w/o Liner | 10.4        | 10.2        | 20.6        |
| <b>Final Form Total</b>      | <b>10.4</b> | <b>10.2</b> | <b>20.6</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 1.00                                 |
| Other Inorganic Materials       | 1.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 1.00                                 |
| Plastics                        | 1.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream consists of radiologically and hazardous general site waste generated from normal site operations. The specific contents include but are not limited to anticontamination clothing, hoses, glove bags, and tools.

Waste Stream ID: **WV-T009**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                   |                       |                       |                                       |                |            |    |
|-------------|-----------------------------------|-----------------------|-----------------------|---------------------------------------|----------------|------------|----|
| Site        | West Valley Demonstration Project | Final Waste Form      | Heterogeneous         | Waste Matrix Code                     | S5420          | Handling   | CH |
| Source Cat. | Analytical Laboratory Waste       | Defense Determination | Pending Determination |                                       | Inventory Date | 12/31/2006 |    |
| Stream Name | TRU General Laboratory Waste      |                       |                       | Activity Concentrations Decayed to CY | N/A            |            |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |             |             |             |
|------------------------------|-------------|-------------|-------------|
| Container Type               | Stored      | Proj.       | Total       |
| 55-gal Drum Dir Ld w/o Liner | 10.0        | 21.2        | 31.2        |
| <b>Current Form Total</b>    | <b>10.0</b> | <b>21.2</b> | <b>31.2</b> |

| Final Form Volumes           |             |             |             |
|------------------------------|-------------|-------------|-------------|
| Container Type               | Stored      | Proj.       | Total       |
| 55-gal Drum Dir Ld w/o Liner | 10.0        | 21.2        | 31.2        |
| <b>Final Form Total</b>      | <b>10.0</b> | <b>21.2</b> | <b>31.2</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 1.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream consists of general laboratory waste generated on-site. The specific contents include anticontamination clothing, bags, wipes, samples, etc.

Waste Stream ID: **WV-T011**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                   |                                       |                       |                   |            |          |    |
|-------------|-----------------------------------|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | West Valley Demonstration Project | Final Waste Form                      | Uncategorized Metal   | Waste Matrix Code | S5111      | Handling | CH |
| Source Cat. | Remediation/D&D Waste             | Defense Determination                 | Pending Determination | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | TRU Glove Boxes                   | Activity Concentrations Decayed to CY |                       |                   | N/A        |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 0.2         | 0.0        | 0.2         |
| Box - Misc                   | 33.9        | 0.0        | 33.9        |
| <b>Current Form Total</b>    | <b>34.1</b> | <b>0.0</b> | <b>34.1</b> |

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 33.9        | 0.0        | 33.9        |
| <b>Final Form Total</b>      | <b>33.9</b> | <b>0.0</b> | <b>33.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 1.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream consists of radiologically and hazardous glove boxes generated from decommissioning and decontamination activities. The specific contents include glove boxes and tools.

Waste Stream ID: **WV-T014**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                   |                       |                       |                                       |            |          |    |
|-------------|-----------------------------------|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | West Valley Demonstration Project | Final Waste Form      | Uncategorized Metal   | Waste Matrix Code                     | S5111      | Handling | CH |
| Source Cat. | Remediation/D&D Waste             | Defense Determination | Pending Determination | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Chemical Process Cell Vessels     |                       |                       | Activity Concentrations Decayed to CY | N/A        |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |              |            |              |
|---------------------------|--------------|------------|--------------|
| Container Type            | Stored       | Proj.      | Total        |
| Box - Misc                | 270.0        | 0.0        | 270.0        |
| <b>Current Form Total</b> | <b>270.0</b> | <b>0.0</b> | <b>270.0</b> |

| Final Form Volumes           |              |            |              |
|------------------------------|--------------|------------|--------------|
| Container Type               | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/o Liner | 270.0        | 0.0        | 270.0        |
| <b>Final Form Total</b>      | <b>270.0</b> | <b>0.0</b> | <b>270.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 1.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream was generated as a result of the decommissioning and decontamination of the Chemical Process Cell. The specific contents of these containers include evaporators, dissolvers, tanks, condensers, etc. These vessels were previously used to reprocess spent fuel rods.

Waste Stream ID: **WV-T016**

## Appendix C

## TRU Waste Inventory Profile Report

|             |   |                       |                       |                                       |            |          |    |
|-------------|---|-----------------------|-----------------------|---------------------------------------|------------|----------|----|
| Site        | West Valley Demonstration Project             | Final Waste Form      | Uncategorized Metal   | Waste Matrix Code                     | S5111      | Handling | CH |
| Source Cat. | Remediation/D&D Waste                         | Defense Determination | Pending Determination | Inventory Date                        | 12/31/2006 |          |    |
| Stream Name | Chemical Process Cell Miscellaneous Equipment |                       |                       | Activity Concentrations Decayed to CY | N/A        |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |              |            |              |
|---------------------------|--------------|------------|--------------|
| Container Type            | Stored       | Proj.      | Total        |
| Box - Misc                | 146.8        | 0.0        | 146.8        |
| <b>Current Form Total</b> | <b>146.8</b> | <b>0.0</b> | <b>146.8</b> |

| Final Form Volumes           |              |            |              |
|------------------------------|--------------|------------|--------------|
| Container Type               | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/o Liner | 146.8        | 0.0        | 146.8        |
| <b>Final Form Total</b>      | <b>146.8</b> | <b>0.0</b> | <b>146.8</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 1.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream was generated as a result of the decommissioning and decontamination of the Chemical Process Cell (CPC). The specific contents of these containers include various jumpers and miscellaneous equipment, etc. The CPC was previously used to reprocess spent fuel rods.

Waste Stream ID: **WV-T017**

## Appendix C

## TRU Waste Inventory Profile Report

|             |  |                                       |                       |                   |            |          |    |
|-------------|--|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | West Valley Demonstration Project                  | Final Waste Form                      | Solidified Inorganics | Waste Matrix Code | S3115      | Handling | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Defense Determination                 | Pending Determination | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Spent Filter Media                                 | Activity Concentrations Decayed to CY |                       |                   | N/A        |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| Box - Misc                | 2.3        | 0.0        | 2.3        |
| <b>Current Form Total</b> | <b>2.3</b> | <b>0.0</b> | <b>2.3</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 2.3        | 0.0        | 2.3        |
| <b>Final Form Total</b>      | <b>2.3</b> | <b>0.0</b> | <b>2.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 1.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream consists of spent filter media generated from filtration of the Fuel Receiving & Storage pool where the remaining spent fuel rods are stored.



Waste Stream ID: **WV-T018a**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                   |                                       |                       |                   |            |          |    |
|-------------|-----------------------------------|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | West Valley Demonstration Project | Final Waste Form                      | Heterogeneous         | Waste Matrix Code | S5400      | Handling | RH |
| Source Cat. | Remediation/D&D Waste             | Defense Determination                 | Pending Determination | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Head End Cell Debris              | Activity Concentrations Decayed to CY |                       |                   | N/A        |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |             |            |             |
|---------------------------|-------------|------------|-------------|
| Container Type            | Stored      | Proj.      | Total       |
| Box - Misc                | 19.5        | 0.0        | 19.5        |
| <b>Current Form Total</b> | <b>19.5</b> | <b>0.0</b> | <b>19.5</b> |

| Final Form Volumes                          |             |            |             |
|---|-------------|------------|-------------|
| Container Type                              | Stored      | Proj.      | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 28.5        | 0.0        | 28.5        |
| <b>Final Form Total</b>                     | <b>28.5</b> | <b>0.0</b> | <b>28.5</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 1.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream consists of debris generated as a result of decommissioning and decontaminating of head end cells. These cells were used to prep the fuel for reprocessing. Waste from the waste tank farm is also included.

Waste Stream ID: **WV-T018b**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                   |                                       |                       |                   |            |          |    |
|-------------|-----------------------------------|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | West Valley Demonstration Project | Final Waste Form                      | Heterogeneous         | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Remediation/D&D Waste             | Defense Determination                 | Pending Determination | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | Head End Cell Debris              | Activity Concentrations Decayed to CY |                       |                   | N/A        |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |              |             |              |
|------------------------------|--------------|-------------|--------------|
| Container Type               | Stored       | Proj.       | Total        |
| 55-gal Drum Dir Ld w/o Liner | 5.0          | 27.5        | 32.4         |
| Box - Misc                   | 146.9        | 0.0         | 146.9        |
| <b>Current Form Total</b>    | <b>151.9</b> | <b>27.5</b> | <b>179.3</b> |

| Final Form Volumes           |              |             |              |
|------------------------------|--------------|-------------|--------------|
| Container Type               | Stored       | Proj.       | Total        |
| 55-gal Drum Dir Ld w/o Liner | 151.8        | 27.5        | 179.3        |
| <b>Final Form Total</b>      | <b>151.8</b> | <b>27.5</b> | <b>179.3</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 1.00                                 |
| Other Inorganic Materials       | 0.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream consists of debris generated as a result of decommissioning and decontaminating of head end cells. These cells were used to prep the fuel for reprocessing. Waste from the waste tank farm is also included. This portion of the waste stream is CH.

Waste Stream ID: **WV-T019**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                   |                                       |                       |                   |            |          |    |
|-------------|-----------------------------------|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | West Valley Demonstration Project | Final Waste Form                      | Filter                | Waste Matrix Code | S5410      | Handling | CH |
| Source Cat. | Remediation/D&D Waste             | Defense Determination                 | Pending Determination | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | FRS Pool Filters                  | Activity Concentrations Decayed to CY |                       |                   | N/A        |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 0.0        | 1.9        | 1.9        |
| <b>Current Form Total</b>    | <b>0.0</b> | <b>1.9</b> | <b>1.9</b> |

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 0.0        | 1.9        | 1.9        |
| <b>Final Form Total</b>      | <b>0.0</b> | <b>1.9</b> | <b>1.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 1.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream consists of cartridge filters stored in sheild boxes

Waste Stream ID: **WV-T020**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                   |                                       |                       |                   |            |          |    |
|-------------|-----------------------------------|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | West Valley Demonstration Project | Final Waste Form                      | Unknown               | Waste Matrix Code | S5400      | Handling | CH |
| Source Cat. | Remediation/D&D Waste             | Defense Determination                 | Pending Determination | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | PPC/XC2 PPE and DAW               | Activity Concentrations Decayed to CY |                       |                   | N/A        |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |            |              |              |
|------------------------------|------------|--------------|--------------|
| Container Type               | Stored     | Proj.        | Total        |
| 55-gal Drum Dir Ld w/o Liner | 0.0        | 226.7        | 226.7        |
| <b>Current Form Total</b>    | <b>0.0</b> | <b>226.7</b> | <b>226.7</b> |

| Final Form Volumes           |            |              |              |
|------------------------------|------------|--------------|--------------|
| Container Type               | Stored     | Proj.        | Total        |
| 55-gal Drum Dir Ld w/o Liner | 0.0        | 226.7        | 226.7        |
| <b>Final Form Total</b>      | <b>0.0</b> | <b>226.7</b> | <b>226.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 1.00                                 |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste stream consists of PPE, piping, vessels, hoses, and other DAW.

Waste Stream ID: **WV-T021**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                   |                                       |                       |                   |            |          |    |
|-------------|-----------------------------------|---------------------------------------|-----------------------|-------------------|------------|----------|----|
| Site        | West Valley Demonstration Project | Final Waste Form                      | Heterogeneous         | Waste Matrix Code | S5000      | Handling | RH |
| Source Cat. | Remediation/D&D Waste             | Defense Determination                 | Pending Determination | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | RHWF Process                      | Activity Concentrations Decayed to CY |                       |                   | N/A        |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |            |             |             |
|------------------------------|------------|-------------|-------------|
| Container Type               | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/o Liner | 0.0        | 80.7        | 80.7        |
| <b>Current Form Total</b>    | <b>0.0</b> | <b>80.7</b> | <b>80.7</b> |

| Final Form Volumes                          |            |              |              |
|---|------------|--------------|--------------|
| Container Type                              | Stored     | Proj.        | Total        |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 0.0        | 115.7        | 115.7        |
| <b>Final Form Total</b>                     | <b>0.0</b> | <b>115.7</b> | <b>115.7</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 10.00                                |
| Other Inorganic Materials       | 10.00                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 652.20                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

This waste consists of misc. metals, filters and plastics.

Waste Stream ID: **WV-W024**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                     |                                       |                          |                   |            |          |    |
|-------------|-------------------------------------|---------------------------------------|--------------------------|-------------------|------------|----------|----|
| Site        | West Valley Demonstration Project   | Final Waste Form                      | Lead/Cadmium Metal Waste | Waste Matrix Code | S5112      | Handling | CH |
| Source Cat. | Discarding Excess/Expired Materials | Defense Determination                 | Pending Determination    | Inventory Date    | 12/31/2006 |          |    |
| Stream Name | TRU Lead                            | Activity Concentrations Decayed to CY |                          |                   | N/A        |          |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes         |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 1.7         | 0.0        | 1.7         |
| Box - Misc                   | 5.1         | 0.0        | 5.1         |
| Box - Misc                   | 12.6        | 0.0        | 12.6        |
| <b>Current Form Total</b>    | <b>19.3</b> | <b>0.0</b> | <b>19.3</b> |

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 17.9        | 0.0        | 17.9        |
| <b>Final Form Total</b>      | <b>17.9</b> | <b>0.0</b> | <b>17.9</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 11340.00                             |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

Haz. Waste No(s).  
D006, D008

No TRUCON Codes Provided

## Waste Stream Description

This waste stream consists of transuranic lead in the following configurations: lead bricks and lead shielding. Note: The size of the waste stream components may be highly variable. In addition to the lead materials listed above, the following wastes are also part of the contents of the containers included in this waste stream: glassware, bags, bottles, oven, ultrasonic chiller, and an old style 8D-2 sample cask. The wastes included in this stream are characterized as mixed because they exhibit the characteristic of toxicity for lead.

Waste Stream ID: **WV-Z001**

## Appendix C

## TRU Waste Inventory Profile Report

|             |                                   |                       |                       |                                       |                |            |    |
|-------------|-----------------------------------|-----------------------|-----------------------|---------------------------------------|----------------|------------|----|
| Site        | West Valley Demonstration Project | Final Waste Form      | Unknown               | Waste Matrix Code                     | U9999          | Handling   | CH |
| Source Cat. | N/A                               | Defense Determination | Pending Determination |                                       | Inventory Date | 12/31/2006 |    |
| Stream Name | West Valley Buried TRU Waste      |                       |                       | Activity Concentrations Decayed to CY | N/A            |            |    |

Waste Volume Detail (m<sup>3</sup>)

| Current Form Volumes      |               |            |               |
|---------------------------|---------------|------------|---------------|
| Container Type            | Stored        | Proj.      | Total         |
| Uncontained               | 1353.0        | 0.0        | 1353.0        |
| <b>Current Form Total</b> | <b>1353.0</b> | <b>0.0</b> | <b>1353.0</b> |

| Final Form Volumes           |               |            |               |
|------------------------------|---------------|------------|---------------|
| Container Type               | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/o Liner | 1353.0        | 0.0        | 1353.0        |
| <b>Final Form Total</b>      | <b>1353.0</b> | <b>0.0</b> | <b>1353.0</b> |

## Waste Material Parameters

| Material Parameter              | Average Density (kg/m <sup>3</sup> ) |
|---------------------------------|--------------------------------------|
| Iron-based Metals/Alloys        | 0.00                                 |
| Aluminum-based Metals/Alloys    | 0.00                                 |
| Other Metals                    | 0.00                                 |
| Other Inorganic Materials       | 10.00                                |
| Cellulosics                     | 0.00                                 |
| Rubber                          | 0.00                                 |
| Plastics                        | 0.00                                 |
| Cements                         | 0.00                                 |
| Inorganic Matrix                | 0.00                                 |
| Organic Matrix                  | 0.00                                 |
| Soils/gravel                    | 0.00                                 |
| Vitrified                       | 0.00                                 |
| Packaging Material, Steel       | 130.80                               |
| Packaging Material, Plastic     | 0.00                                 |
| Packaging Material, Cellulosics | 0.00                                 |
| Packaging Material, Lead        | 0.00                                 |

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

## Waste Stream Description

N/A

**ANNUAL TRANSURANIC WASTE INVENTORY REPORT – 2007**

**APPENDIX D**

**Inventory Comparisons**



## D-1 Introduction

This appendix presents transuranic (TRU) waste inventory comparisons for volumes, waste material parameters, scaling factors, and radionuclide data between the Waste Isolation Pilot Plant (WIPP) Compliance Certification Application (CCA), the Compliance Recertification Application 2004 (CRA) Performance Baseline Calculation (PABC), and this report. The data for the CCA are reported in the Transuranic Waste Baseline Inventory Report (TWBIR), Revision 2 (DOE 1995b), and TWBIR, Revision 3 (DOE 1996a). Data reported for the CRA are from Appendix DATA, Attachment F, of the CRA (DOE 2004) and the TWBIR-2004 DOE (2006c). The TWBIR-2004 is the most recent inventory report prior to this report. The TWBIR-2004 report was prepared to include updated information for EPA's approval of the CRA-2004 and is referred to as the PABC-2004 inventory in this document. This 2007 annual report documents the TRU waste inventory information based on a cutoff date of December 31, 2006. The inventory in this report is referred to as the 2006 Inventory throughout this appendix.

Each TRU generator waste site has provided the WIPP with their best estimates for the volumes, physical characteristics, waste material parameters (WMPs), and radiological characteristics of the individual TRU waste streams that are stored on or projected for their site. Since the TWBIR-2004 was prepared, a number of significant developments have occurred that can change the volume, physical characteristics, or radiological characteristics of TRU waste streams as they were reported by the sites for the 2006 Inventory. These developments include:

- Regulations and decisions at the federal and state level. For example, Idaho National Laboratory (INL) has begun preparations to ship pre-1970 buried waste to the WIPP, as mandated by a federal court decision (Wasden 2003). Shipment of pre-1970 buried waste has increased the volume of stored waste at INL because this type of waste is generally not planned for disposal at the WIPP;
- Waste program management decisions. All waste streams from the Hanford Office of River Protection (RP) and two sodium-bearing waste streams from INL have been re-categorized as potential WIPP waste pending finalization of the U.S. Department of Energy's (DOE's) TRU waste determination process. This change significantly reduced the volume of stored remote-handled (RH) TRU waste in the 2006 Inventory;
- Availability and confidence in supplemental characterization information or process knowledge. For example, waste streams stored at the Los Alamos National Laboratory (LANL) have a significant increase in curies in the 2006 Inventory because of improvements in LANL's methodology for tracking and characterizing TRU waste;
- Site estimates of projected TRU waste stream volumes. Changes in projected waste streams directly affect the contact-handled (CH) and RH waste scaling factors that determine the disposal inventory for performance assessment (PA);
- Continuing waste emplacement at the WIPP. As of December 31, 2006, 44,687 cubic meters (m<sup>3</sup>) of waste have been emplaced at the WIPP, reducing the volumes of stored waste at the sites by an equal amount;

- Methodology enhancements. The 2006 Inventory incorporates standardized masses for packaging material for each type of waste container (Crawford 2007). This approach provides a consistent and conservative representation of packaging materials over all waste streams. This approach has increased the masses of cellulose and plastics in the 2006 Inventory; and
- Enhanced Data Checks. Several data checks were performed on the data collected from the sites to ensure all radionuclides were reported in which, for example, a few mixed fission products were typically reported and radionuclides in secular equilibrium were reported. The results of these checks were discussed with the TRU waste sites and data were changed, as necessary, under the site's direction. In addition, cement data were rechecked and included in the inventory whenever the presence of cement was reported in a comment field for a waste stream.

The WIPP has been open and operating for nearly nine years. The large quantity TRU waste sites are all actively preparing acceptable knowledge (AK) and are characterizing waste for shipment to and emplacement in the WIPP. The characterization data for this emplaced waste are documented in the WIPP Waste Information System (WWIS) database. As time progresses, the data in the WWIS and TRU waste characterization by the sites are used to update the TRU waste inventory and continue to provide a more accurate representation of the expected inventory at closure of the WIPP.

## D-2 Volumetric Comparisons

The largest reported volume change occurred at the RP when the DOE Carlsbad Field Office (CBFO) requested that all of the reported TRU waste from the RP tanks be re-categorized as "potential" WIPP-bound waste (Moody 2007b). These waste streams have been removed from the 2006 Inventory for PA and are reported as potential waste in section 4.0 of this report. The final form volume of CH-TRU waste reported by the RP is 1,117 m<sup>3</sup> (RP-W754 and RP-W755) and the RH-TRU waste final form volume is 1,687 m<sup>3</sup> (RP-W013 and RP-W016). These CH and RH volumes are less than the volumes reported for the RP site in the PABC, 3,932 m<sup>3</sup> and 4,469 m<sup>3</sup>, respectively. These changes are based on changes to tank waste processing estimates and direct packaging of dried tank waste in RH canisters.

Oak Ridge National Laboratory (ORNL) reported all of their TRU waste as projected waste with a final form volume of 450 m<sup>3</sup> of CH and 660 m<sup>3</sup> of RH for the PABC inventory because all of this waste was going to be treated and re-packaged in their TRU Waste Processing Facility. For the 2006 Inventory, the ORNL waste has been re-categorized as stored and projected waste, where the new final form projected volumes are 340 m<sup>3</sup> of CH and 360 m<sup>3</sup> RH wastes. These changes significantly decreased the volume of projected waste for the 2006 Inventory. In addition, ORNL developed a new scenario for processing Melton Valley and other tank wastes (OR-W215) that increased the RH-TRU final form waste volume for ORNL by 698 m<sup>3</sup> (890 m<sup>3</sup> reported in 2006 vs. 192 m<sup>3</sup> reported in the PABC).

Tables D-1, D-2, D-3, and D-4 show the final form anticipated (stored + projected) volumes of small quantity site CH- and RH-TRU waste, and CH- and RH-TRU waste for large quantity sites

with the small quantity site volumes totaled. The tables compare the 2006 Inventory volumes with the volumes reported for the CCA and PABC.

**Table D-1. Small Quantity Site CH-TRU Waste Anticipated Volumes**

| Site   | CCA<br>(m <sup>3</sup> )   | PABC<br>(m <sup>3</sup> )  | 2006<br>Inventory<br>(m <sup>3</sup> ) |
|--|----------------------------|----------------------------|--|
| Ames Laboratory-Iowa State University (AL)         | 4.2E-01                    | 0.0E+00                    | 0.0E+00                                |
| Argonne National Laboratory - East (ANL-E)         | 1.4E+02                    | 1.9E+02                    | 8.8E+01                                |
| Argonne National Laboratory - West (MFC)           | 7.5E+02                    | 4.4E+01                    | 3.7E+01                                |
| Battelle Columbus Laboratories (BC)                | 0.0E+00                    | 5.2E+00                    | 0.0E+00                                |
| Bettis Atomic Power Laboratory (BAPL)              | 1.2E+02                    | 1.9E+01                    | 1.9E+01                                |
| Energy Technology Engineering Center (ETEC)        | 1.7E+00                    | 2.3E+00                    | 0.0E+00                                |
| Knolls Atomic Power Laboratory - NFS (KAPL-NFS)    | 0.0E+00                    | 2.3E+02                    | 1.3E+02                                |
| Lawrence Berkley Laboratory (LBL)                  | 0.0E+00                    | 0.0E+00                    | 4.2E-01                                |
| Lawrence Livermore National Laboratory (LLNL)      | 9.4E+02                    | 2.4E+03                    | 3.8E+02                                |
| Mound Plant (MD)                                   | 2.7E+02                    | 0.0E+00                    | 0.0E+00                                |
| Nevada Test Site (NTS)                             | 6.3E+02                    | 1.1E+03                    | 6.7E+02                                |
| Paducah Gaseous Diffusion Plant (PA)               | 1.9E+00                    | 1.1E+01                    | 0.0E+00                                |
| Pantex Plant (PX)                                  | 6.2E-01                    | 0.0E+00                    | 0.0E+00                                |
| Sandia National Laboratories – Albuquerque (SNL-A) | 1.4E+01                    | 2.4E+01                    | 2.9E+01                                |
| Teledyne Brown Engineering (TB)                    | 2.1E-01                    | 0.0E+00                    | 0.0E+00                                |
| U.S. Army Materiel Command (Army)                  | 2.5E+00                    | 2.5E+00                    | 2.1E-01                                |
| University of Missouri Research Reactor (MU)       | 1.0E+00                    | 1.5E+00                    | 0.0E+00                                |
| <b>Total</b>                                       | <b>2.9E+03<sup>1</sup></b> | <b>4.0E+03<sup>1</sup></b> | <b>1.3E+03<sup>2</sup></b>             |

<sup>1</sup>Volumes may differ with summation of small quantity site volumes because sites that have been dispositioned are not included in the table.

<sup>2</sup>Additional precision is reflected in changed value.

**Table D-2. Small Quantity Site RH-TRU Waste Anticipated Volumes**

| Site  | CCA<br>(m <sup>3</sup> )   | PABC<br>(m <sup>3</sup> )    | 2006 Inventory<br>(m <sup>3</sup> ) |
|---|----------------------------|------------------------------|-------------------------------------|
| Argonne National Laboratory - East (ANL-E)          | 0.0E+00                    | 1.2E+02                      | 4.3E+01                             |
| Argonne National Laboratory - West (MFC)            | 1.3E+03                    | 9.3E+01                      | 4.1E+01                             |
| Battelle Columbus Laboratories (BC)                 | 5.8E+02                    | 4.6E+01                      | 0.0E+00                             |
| Bettis Atomic Power Laboratory (BAPL)               | 6.7E+00                    | 2.0E+00                      | 3.6E+00                             |
| Energy Technology Engineering Center (ETEC)         | 8.9E-01                    | 5.0E+00                      | 0.0E+00                             |
| Knolls Atomic Power Laboratory-Schenectady (KAPL-S) | 0.0E+00                    | 1.4E+02                      | 1.1E+02                             |
| Sandia National Laboratories-Albuquerque (SNL-A)    | 0.0E+00                    | 4.6E+00                      | 2.0E+01                             |
| <b>Total</b>  | <b>1.9E+03<sup>1</sup></b> | <b>4.0E+02<sup>1,2</sup></b> | <b>2.2E+02</b>                      |

<sup>1</sup>Volumes may differ with summation of small quantity site volumes because sites that have been dispositioned are not included in the table.

<sup>2</sup>Additional precision is reflected in changed value.

**Table D-3. WIPP Total CH-TRU Waste Anticipated Volumes by Site**

| Site  | CCA<br>(m <sup>3</sup> )   | PABC<br>(m <sup>3</sup> )  | 2006 Inventory<br>(m <sup>3</sup> ) |
|---|----------------------------|----------------------------|-------------------------------------|
| Hanford Office of River Protection (RP)           | 0.0E+00                    | 3.9E+03                    | 0.0E+00                             |
| Hanford Richland Operations (RL)                  | 4.6E+04                    | 1.8E+04                    | 1.4E+04                             |
| Idaho National Laboratory (INL)                   | 2.9E+04                    | 7.8E+04                    | 5.9E+04                             |
| Los Alamos National Laboratory (LANL)             | 1.8E+04                    | 1.5E+04                    | 1.6E+04                             |
| Oak Ridge National Laboratory (ORNL)              | 1.6E+03                    | 4.5E+02                    | 1.0E+03                             |
| Rocky Flats Environmental Technology Site (RFETS) | 5.1E+03                    | 8.1E+03                    | 0.0E+00                             |
| Savannah River Site (SRS)                         | 9.6E+03                    | 1.5E+04                    | 1.1E+04                             |
| Total of Small Quantity Sites                     | 2.9E+03                    | 4.0E+03                    | 1.3E+03 <sup>2</sup>                |
| <b>Total</b>                                      | <b>1.1E+05<sup>1</sup></b> | <b>1.4E+05<sup>1</sup></b> | <b>1.0E+05</b>                      |

<sup>1</sup>Volumes may differ with summation of small quantity site volumes because sites that have been dispositioned are not included in the table.

<sup>2</sup>Additional precision is reflected in changed value.

**Table D-4. WIPP Total RH-TRU Waste Anticipated Volumes by Site**

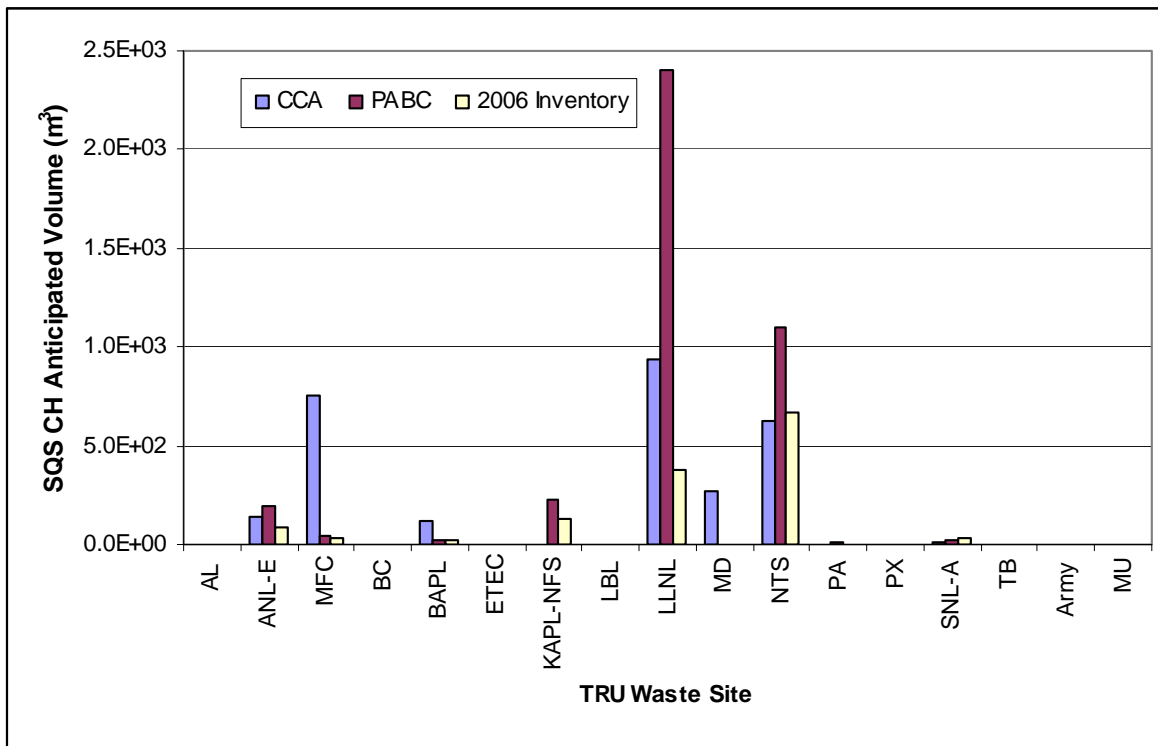
| Site  | CCA<br>(m <sup>3</sup> )   | PABC<br>(m <sup>3</sup> )  | 2006 Inventory<br>(m <sup>3</sup> ) |
|---|----------------------------|----------------------------|-------------------------------------|
| Hanford Office of River Protection (RP)           | 0.0E+00                    | 4.5E+03                    | 0.0E+00                             |
| Hanford Richland Operations (RL)                  | 2.2E+04                    | 1.5E+03                    | 1.3E+03                             |
| Idaho National Laboratory (INL)                   | 2.2E+02                    | 2.2E+02                    | 3.7E+02                             |
| Los Alamos National Laboratory (LANL)             | 1.9E+02                    | 1.2E+02 <sup>2</sup>       | 9.8E+01                             |
| Oak Ridge National Laboratory (ORNL)              | 2.9E+03                    | 6.6E+02                    | 1.3E+03                             |
| Rocky Flats Environmental Technology Site (RFETS) | 0.0E+00                    | 0.0E+00                    | 0.0E+00                             |
| Savannah River Site (SRS)                         | 0.0E+00                    | 2.3E+01                    | 7.8E+01                             |
| Total of Small Quantity Sites                     | 1.9E+03                    | 4.0E+02 <sup>2</sup>       | 2.2E+02                             |
| <b>Total</b>                                      | <b>2.7E+04<sup>1</sup></b> | <b>7.4E+03<sup>1</sup></b> | <b>3.3E+03<sup>2</sup></b>          |

<sup>1</sup>Volumes may differ with summation of small quantity site volumes because sites that have been dispositioned are not included in the table.

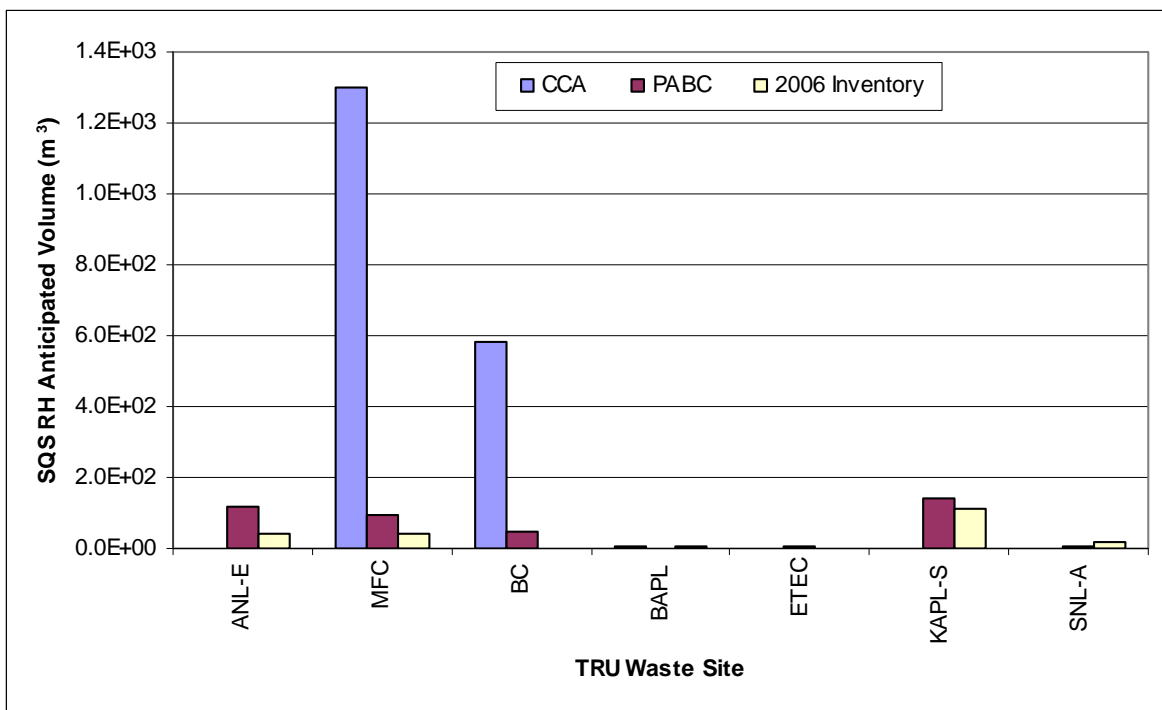
<sup>2</sup>Additional precision is reflected in changed values.

Figures D-1 and D-2 are graphical representations of the volume changes from the CCA, PABC for the CRA-2004, and the 2006 Inventory. In Figure D-1, it is apparent that in most cases, with the exception of BAPL and SNL, the CH-TRU waste inventory has decreased from the volume reported in the PABC. In some cases (such as BCL, ETEC, Mound, and the University of Missouri Research Reactor), all TRU waste has either been dispositioned at the WIPP or transferred to another site to facilitate certification and shipment of the waste to the WIPP. This behavior is consistent with the sites shipping waste to the WIPP, thereby reducing their volume of stored waste.

Figure D-2 shows an increase in ORNL RH-TRU waste volume due to changes in volume expected from processing of Melton Valley and other tank waste mentioned previously. BAPL and SNL also reported increases in RH waste volume in the 2006 Inventory. All other small quantity sites show a decrease due to either transfer of waste to other sites (as is the case for BCL and ETEC) or better understanding of waste volumes being managed at the sites.



**Figure D-1. Small Quantity Site CH-TRU Waste Anticipated Volumes**



**Figure D-2. Small Quantity Site RH-TRU Waste Anticipated Volumes**

Figures D-3 and D-4 are graphical representations of the volumes shown in Tables D-3 and D-4. The figures clearly illustrate where volumetric changes have occurred over time. Decreases in site CH-TRU volume are attributable to shipments made to the WIPP and to other DOE TRU waste sites. The estimations of waste volumes at Hanford RL have improved as the site is beginning to locate and characterize waste for shipment to the WIPP. Figure D-4 also shows a decrease in RH-TRU waste volume based on the re-categorization of RP tank waste (1,687 m<sup>3</sup>) as potential WIPP waste (Moody 2007b) and a slight increase in waste at INL due to transfer of some waste from MFC to INL.

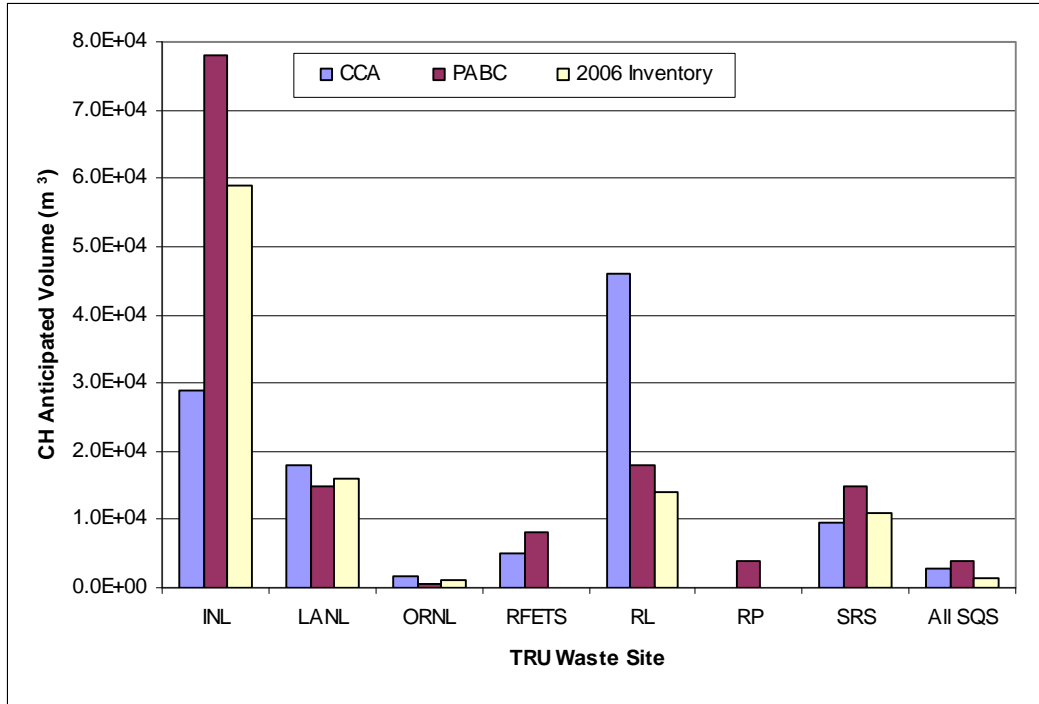


Figure D-3. Total CH-TRU Waste Anticipated Volumes by Site

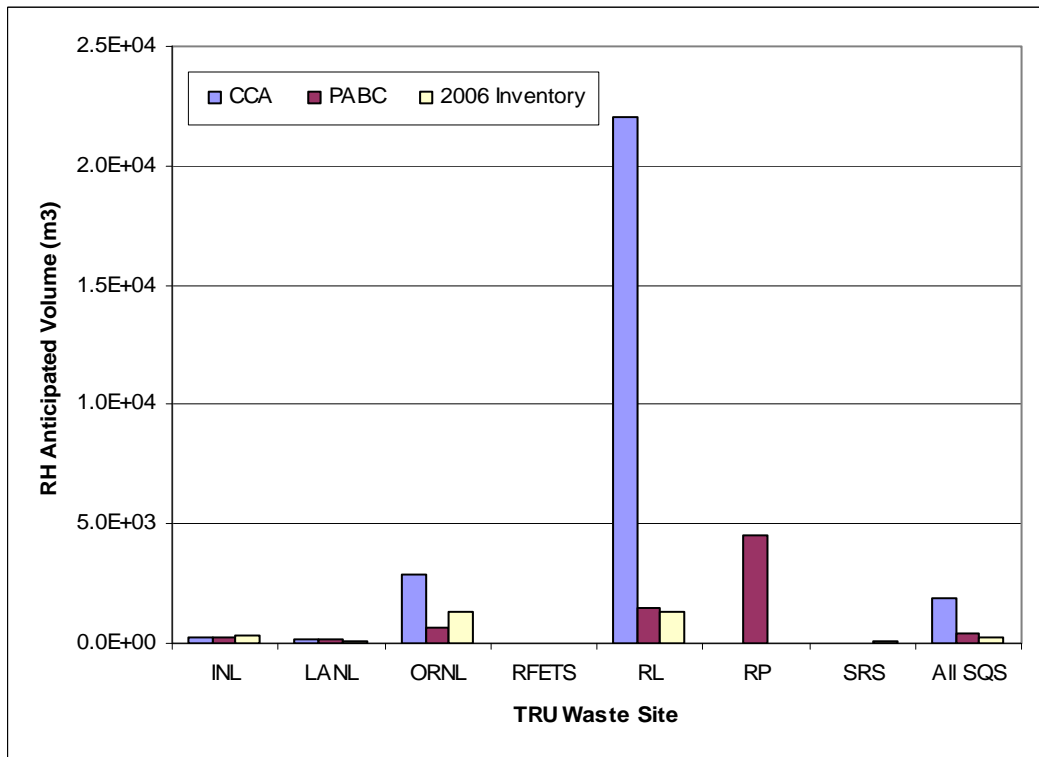


Figure D-4. Total RH-TRU Waste Anticipated Volumes by Site

### D-3 Waste Material Parameter Comparisons

Changes have occurred in the waste material parameters (WMPs) for several reasons:

- 1) Additional waste streams added to the inventory. For example INL and SRS added waste streams while AK was developed on site that includes waste parameters that match the waste as it is being characterized. Examples of new waste streams added to inventory are LA-LAMHD01 (constructed from containers from TWBIR waste streams LA-T004, LA-T005, LA-T009, LA-W001, LA-W004, LA-W005, and LA-W009) and LA-LAMHD03 (constructed from containers from TWBIR waste streams LA-T004, LA-T005, LA-T007, LA-T009, LA-W004, and LA-W005). Typically, when waste is assigned to these waste streams, the waste material parameters are refined without changes to the volume of the containers managed at the site.
- 2) Presence of more characterization data. This means as more characterization data real-time radiography (RTR) or visual examination (VE) become available at the sites (SRS being a site with approximately 80% of their TRU waste in drums characterized, as an example), the information reported includes that characterization data in the estimate. Therefore, a better estimate of the WMPs is reported each year.
- 3) Removal of waste from the 2006 Inventory as other disposition paths is found. As an example, Hanford RL and ORNL both dispositioned nearly 50% of the TRU waste streams managed on-site as low-level waste (LLW) or mixed low-level waste (MLLW) and adjusted their inventory accordingly. Other sites typically identify some fraction of their waste as LLW/MLLW after characterization. Disposition of waste streams as LLW/MLLW removes waste from the TRU inventory, changing the WMPs for the waste stream.
- 4) The 2006 Inventory has standardized container material densities across the waste streams.

Tables D-5 and D-6 show the WMPs for CH- and RH-TRU waste, respectively. The waste and packaging material parameters are reported directly from the CCA, PABC, and the 2006 Inventory.



**Table D-5. CH-TRU Average Waste Material and Packaging Parameters**

| Waste Material Parameters     | CCA<br>(kg/m <sup>3</sup> ) | PABC<br>(kg/m <sup>3</sup> ) | 2006 Inventory<br>(kg/m <sup>3</sup> ) |
|-------------------------------|-----------------------------|------------------------------|--|
| Iron-Based Metal/Alloys       | 1.7E+02                     | 1.1E+02                      | 1.8E+02                                |
| Aluminum-Based Metal/Alloys   | 1.8E+01                     | 1.4E+01                      | 1.5E+01                                |
| Other Metal/Alloys            | 6.7E+01                     | 3.2E+01                      | 1.1E+01                                |
| Other Inorganic Materials     | 3.1E+01                     | 4.0E+01                      | 3.4E+01                                |
| Vitrified                     | 5.5E+01                     | 5.8E+00                      | 0.0E+00                                |
| Cellulosics                   | 5.4E+01                     | 6.0E+01                      | 7.3E+01                                |
| Rubber                        | 1.0E+01                     | 1.3E+01                      | 6.6E+00                                |
| Plastics                      | 3.4E+01                     | 4.3E+01                      | 8.2E+01                                |
| Solidified Inorganic Material | 5.4E+01                     | 1.1E+02                      | 1.1E+02                                |
| Solidified Organic Material   | 5.6E+00                     | 3.3E+01                      | 4.6E+01                                |
| Cements                       | 5.0E+01                     | 3.9E+01                      | 6.8E+01                                |
| Soils/Gravels                 | 4.4E+01                     | 1.1E+02                      | 9.1E+00                                |
| <b>Packaging Materials</b>    |                             |                              |  |
| Steel                         | 1.4E+02                     | 1.7E+02                      | 1.8E+02                                |
| Plastic                       | 2.6E+01                     | 1.7E+01                      | 1.9E+01                                |
| Lead                          | 0.0E+00                     | 1.3E-02                      | 0.0E+00                                |
| Cellulosics                   | 0.0E+00                     | 0.0E+00                      | 4.7E+00                                |

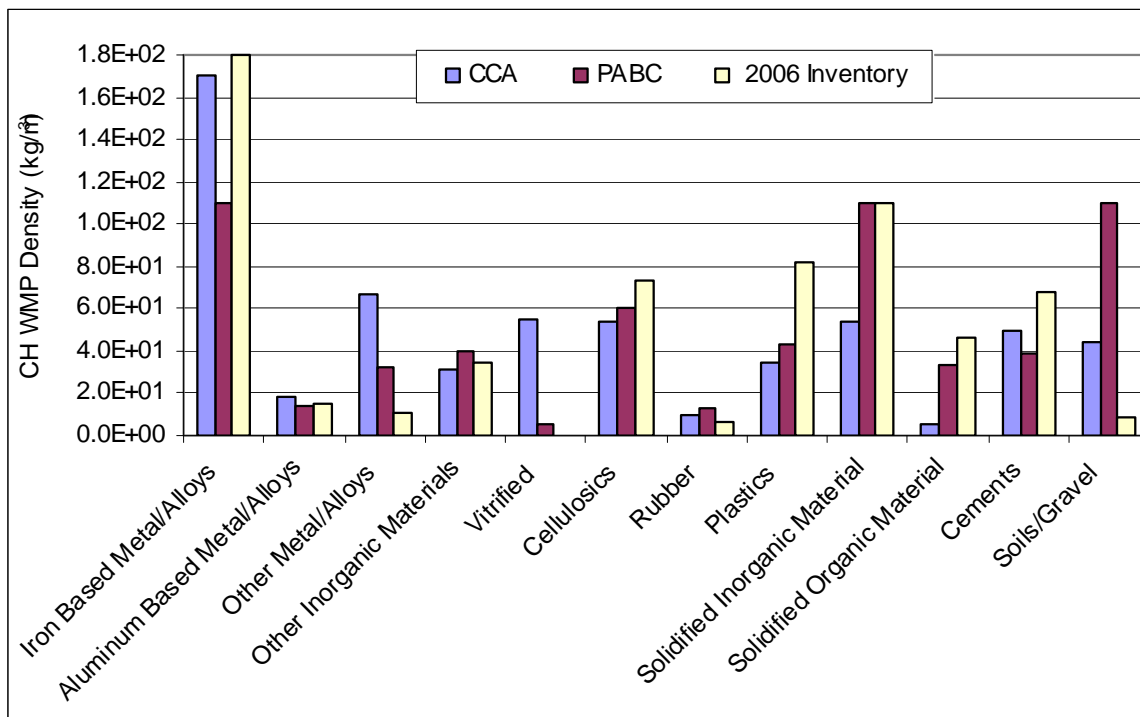
**Table D-6. RH-TRU Average Waste Material and Packaging Parameters**

| Waste Material Parameters     | CCA<br>(kg/m <sup>3</sup> ) | PABC<br>(kg/m <sup>3</sup> ) | 2006 Inventory<br>(kg/m <sup>3</sup> ) |
|-------------------------------|-----------------------------|------------------------------|--|
| Iron-Based Metal/Alloys       | 1.0E+02                     | 5.9E+01                      | 1.9E+02                                |
| Aluminum-Based Metal/Alloys   | 7.1E+00                     | 5.0E+00                      | 1.0E+01                                |
| Other Metal/Alloys            | 2.5E+02                     | 5.7E+01                      | 4.5E+01                                |
| Other Inorganic Materials     | 6.4E+01                     | 1.6E+01                      | 2.3E+01                                |
| Vitrified                     | 4.7E+00                     | 1.2E-01                      | 7.2E-02                                |
| Cellulosics                   | 1.7E+01                     | 9.3E+00                      | 1.4E+01                                |
| Rubber                        | 3.3E+00                     | 6.7E+00                      | 4.7E+00                                |
| Plastics                      | 1.5E+01                     | 8.0E+00                      | 1.8E+01                                |
| Solidified Inorganic Material | 2.2E+01                     | 6.2E+01                      | 5.9E+02                                |
| Solidified Organic Material   | 9.3E-01                     | 8.3E-01                      | 7.1E-01                                |
| Cements                       | 1.9E+01                     | 1.9E+00                      | 1.2E+01                                |
| Soils/Gravel                  | 1.0E+00                     | 5.0E+01                      | 7.7E+01                                |
| <b>Packaging Materials</b>    |                             |                              |  |
| Steel                         | 4.5E+02                     | 5.4E+02                      | 6.1E+02                                |
| Steel Plug                    | 2.2E+03                     | 0.0E+00                      | 0.0E+00                                |
| Plastic                       | 3.1E+00                     | 3.1E+00                      | 1.1E+01                                |
| Lead                          | 4.7E+02                     | 4.2E+02                      | 5.4E+00                                |
| Cellulosics                   | 0.0E+00                     | 0.0E+00                      | 0.0E+00                                |

Figure D-5 is a graphical representation of the changes that have occurred in waste material parameters since the CCA, for the CH-TRU waste inventory. The 2006 Inventory shows a marked increase in iron-based metal/alloys and plastic for CH-TRU waste. The increase in iron-based metal is inconsequential for PA because the repository exceeds the lower limit of iron required for compliant repository performance with the steel from containers alone (DOE 2004c). In other words, the lower limit for iron-based materials is already exceeded, and any further increase in the mass of iron-based materials has no significant impact on repository performance.

Cellulose, plastic and rubber are tracked because these waste materials and packaging materials contribute to gas generation in the repository. Increases observed in waste material densities for plastic and cellulose were partially offset by a decrease in rubber. Plastic material density increased by 91 percent, while cellulose increased by 22 percent as determined by the difference of the PABC density from the 2006 density divided by the PABC density multiplied by 100. The decrease in rubber was 49 percent. The increase in plastic waste materials at SRS was most pronounced based on underestimation of the presence of plastic huts in the reported waste streams at the site. In addition, increases in both plastic and cellulose were observed as the packaging materials for the inventory were standardized for WIPP-approved container configurations.

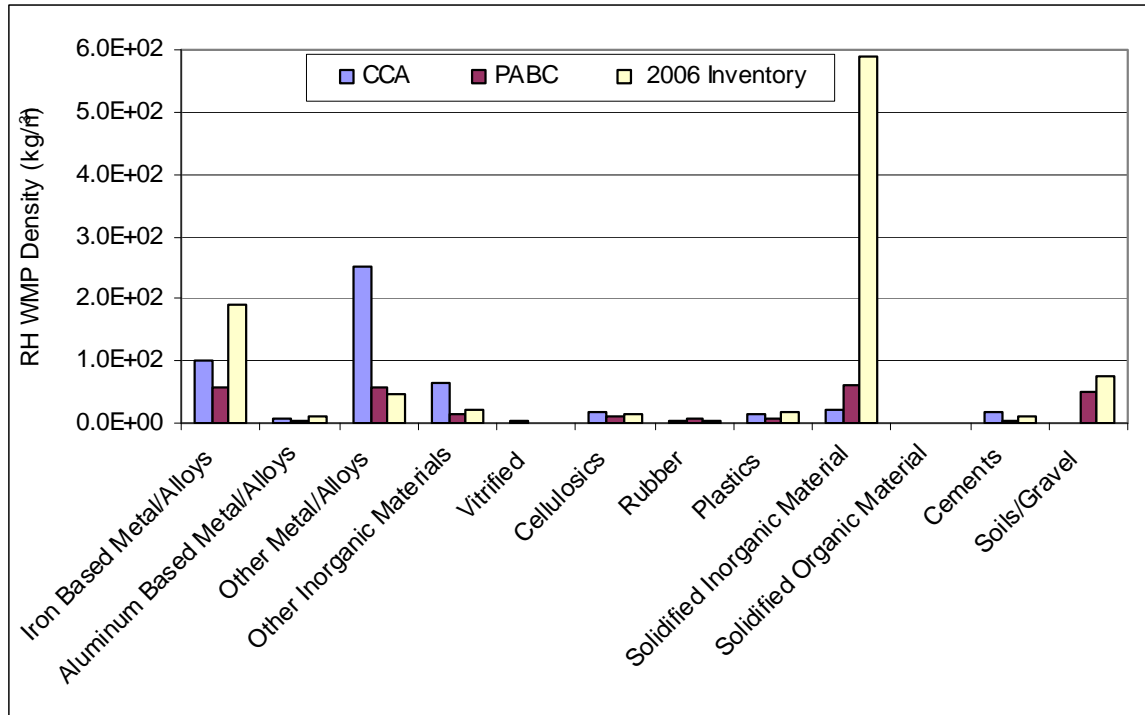
Other notable changes in CH-TRU waste material parameters include increased cement content and a decrease in soils/gravel. Using the same algorithm stated above, the increase in cement density was 74 percent and the decrease in soils/gravel was 92 percent with respect to the densities reported in the PABC. The cement density increased as a result of a concerted focus on obtaining this information as part of the waste material parameters for all waste streams and all sites. In the PABC, cement content was reported in various comments and as other inorganic material, if reported at all. The decrease in density of soils/gravel is primarily due to better characterization data from projects such as the Idaho Closure Project (ICP), where previous inventories assumed larger amounts of soils would be present in the CH-TRU waste being retrieved at INL.



**Figure D-5. CH-TRU Waste Material Parameters**

Figure D-6 is a graphical representation of the changes that have occurred in waste material parameters from the CCA through the 2006 Inventory, for the RH-TRU waste. The increase in the solidified inorganic material comes from the increase in ORNL tank sludge (OR-W215) and Hanford uncontained solids from K-East (RL105-09) based on process knowledge obtained in 2006 (LANL 2008). The increase in iron-based metal/alloys is inconsequential for the same reason described for CH-TRU waste.

Cellulose and plastics increased by 51 percent and 125 percent, respectively, while rubber decreased by 30 percent in the RH-TRU waste inventory, using the algorithm stated above. The increase in cellulose was due to debris and filter waste at SRS and the increase in plastic was the result of liners identified as standard packaging material in drums packed in RH canisters. Other notable increases in the RH-TRU waste inventory include an increase of 229 percent for iron-based metal/alloys and an 851 percent increase for solidified inorganic material. The iron-based metal increased in waste streams from K-basin and the 300 areas at Hanford RL and from associated container packaging in those waste streams. The pronounced change in solidified inorganic material was the result of addition of North Load Out Pit sludge from K-basin at Hanford RL and from re-categorizing vitrified waste identified in the IN-W219.110 waste stream at INL to solidified inorganic material, as vitrification was not performed on site.



**Figure D-6. RH-TRU Waste Material Parameters**

#### D-4 Scaling Factor Comparisons

The current CH and RH scaling factors are applied to the projected components of the waste to determine the disposal inventory. The scaling factors for CH- and RH-TRU wastes are larger now as compared to the CCA or CRA-2004, particularly for the RH waste. A large volume of RH waste from the RP has been re-categorized from the projected category to potential WIPP-bound waste, thereby reducing the volume of projected waste and increasing the corresponding scaling factor. The detailed method used for determination of the scaling factor is presented in section 2.2.1 of this report, Volume and Scaling Calculations.

Table D-7 shows how the scaling factors have changed as reported in the CCA, PABC, and the 2006 Inventory. The scaling factor for CH-TRU waste in the 2006 Inventory has increased significantly because of a decrease in the projected component of the inventory. The scaling factor for RH-TRU waste reported in the 2006 Inventory has also increased significantly because of a decrease in the volumes of both stored and projected RH-TRU waste at the sites. All scaling factors assume a full repository, where the CH- and RH-TRU waste volumes are 168,485 and 7,079 m<sup>3</sup>, respectively.

**Table D-7. CH and RH Scaling Factors Used to Generate Disposal Inventory**

|                             | <b>CCA</b>      | <b>PABC</b> | <b>2006 Inventory</b> |
|-----------------------------|-----------------|-------------|-----------------------|
| CH-TRU Waste Scaling Factor | 2.05            | 1.48        | 7.74                  |
| RH-TRU Waste Scaling Factor | NA <sup>1</sup> | 0.861       | 6.56                  |

<sup>1</sup>RH-TRU waste scaling factor was not applied to RH-TRU waste in the CCA.

### **D-5 Total Unscaled Curies Radionuclide Comparisons**

Radionuclide total unscaled curie comparisons are presented by site in Tables D-8 and D-9 for CH- and RH-TRU waste, respectively. The unscaled curies in these tables include curie activity from all TRU waste (emplaced, stored, and projected) for a given site. Additional characterization data since the PABC led to better information for the 2006 Inventory. The increase in CH-TRU unscaled curies between CRA-2004 (shown in the table as PABC) and the 2006 Inventory is due to increases at LANL, SRS, and RFETS. Both CH- and RH-TRU waste streams at LANL had increased in CH-TRU curies because of changes in the methodology used for tracking and characterization of TRU waste. The TRU waste inventory at LANL has been tied directly to the site container database. This database includes characterization data on radionuclides and AK information about waste material parameters. Both CH- and RH-TRU waste streams at SRS had a significant increased in total curies after receiving waste from BCL. RFETS data shown in these tables come from WWIS data for emplaced waste and show increased activity over that reported for the PABC. Finally, RH-TRU waste streams at Hanford RL, INL, and the small quantity sites have increased in activity. The increase in RH waste activity at Hanford RL is from increased Cs-137 and Sr-90 reported for the Waste Treatment Plant debris waste stream and Pu-241 reported in K-basin sludge. The increase in RH-TRU activity from INL is from increased Cs-137, Sr-90 and Pu-241 reported for the waste originating from the Alpha Gamma Hot Cells and is based on new AK information. Slight increases in RH-TRU activity have been noted for small quantity sites where data checks were performed and discussed with the sites on a case-by-case basis and radionuclides were revised accordingly.

The total activity for CH-TRU waste at small quantity sites, as shown in Tables D-8 and D-10, has diminished since the PABC inventory because of disposal of their waste in the WIPP and because waste has been moved to other DOE TRU waste sites for characterization. Figures D-7 and D-8 graphically depict the data in Tables D-8 and D-9.

**Table D-8. Contact Handled Unscaled Curies by Site**

| Site <sup>1</sup>                                 | CCA <sup>2</sup> (Ci) | PABC <sup>3</sup> (Ci) | 2006 Inventory <sup>4</sup> (Ci) |
|---|-----------------------|------------------------|----------------------------------|
| Los Alamos National Laboratory (LANL)             | 2.03E+05              | 1.10E+05               | 7.23E+05                         |
| Hanford Richland Operations (RL)                  | 1.62E+05              | 1.17E+06               | 5.11E+05                         |
| Hanford Office of River Protection (RP)           | --                    | 1.13E+05               | --                               |
| Savannah River Site (SRS)                         | 5.65E+05              | 1.33E+06               | 2.21E+06                         |
| Rocky Flats Environmental Technology Site (RFETS) | 1.16E+06              | 8.70E+05               | 1.02E+06                         |
| Idaho National Laboratory (INL)                   | 3.51E+05              | 5.85E+05               | 4.83E+05                         |
| Oak Ridge National Laboratory (ORNL)              | 6.38E+04              | 6.68E+04               | 5.00E+04                         |
| Total of Small Quantity Sites (SQS)               | 8.01E+03              | 6.22E+04               | 9.20E+04                         |
| <b>Grand Totals</b>                               | <b>2.51E+06</b>       | <b>4.30E+06</b>        | <b>5.09E+06</b>                  |

<sup>1</sup>Only considers WIPP-bound waste.

<sup>2</sup>Decayed through 1995; <sup>3</sup>Decayed through 2001, value reflects emplaced activity not addressed in Revision 0;

<sup>4</sup>Decayed through 2006.

**Table D-9. Remote Handled Unscaled Curies by Site**

| Site <sup>1</sup>                                 | CCA <sup>2</sup> (Ci) | PABC <sup>3</sup> (Ci) | 2006 Inventory <sup>4</sup> (Ci) |
|---|-----------------------|------------------------|----------------------------------|
| Los Alamos National Laboratory (LANL)             | 6.30E+02              | 6.38E+01               | 6.21E+03                         |
| Hanford Richland Operations (RL)                  | 3.23E+04              | 1.01E+06               | 1.60E+06                         |
| Hanford Office of River Protection (RP)           | 0.00E+00              | 4.27E+05               | 0.00E+00                         |
| Savannah River Site (SRS)                         | 4.20E+01              | 3.50E+02               | 7.44E+03                         |
| Rocky Flats Environmental Technology Site (RFETS) | --                    | --                     | --                               |
| Idaho National Laboratory (INL)                   | 7.39E+03              | 3.26E+03               | 1.52E+04                         |
| Oak Ridge National Laboratory (ORNL)              | 9.81E+04              | 1.48E+05               | 5.08E+05                         |
| Total of Small Quantity Sites (SQS)               | 5.78E+02              | 8.85E+04               | 9.74E+04                         |
| <b>Grand Totals</b>                               | <b>1.39E+05</b>       | <b>1.68E+06</b>        | <b>2.24E+06</b>                  |

<sup>1</sup>Only considers WIPP-bound waste.

<sup>2</sup>Decayed through 1995.

<sup>3</sup>Decayed through 2001, value reflects emplaced activity not addressed in Revision 0.

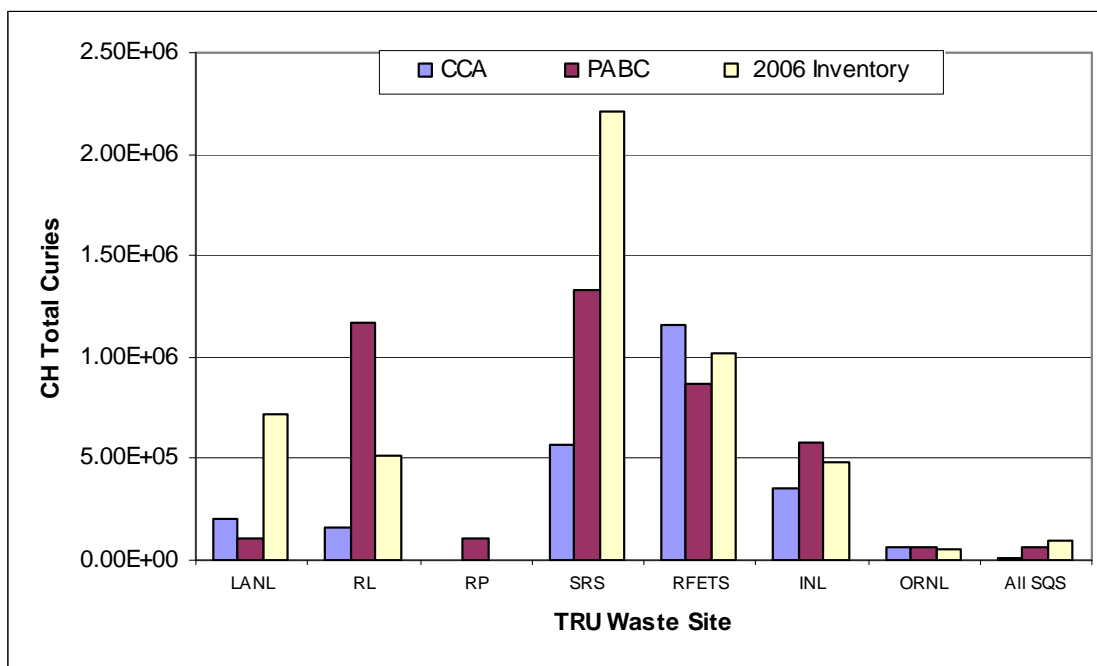
<sup>4</sup>Decayed through 2006.

**Table D-10. 2006 Small Quantity Site Unscaled Curie Inventory**

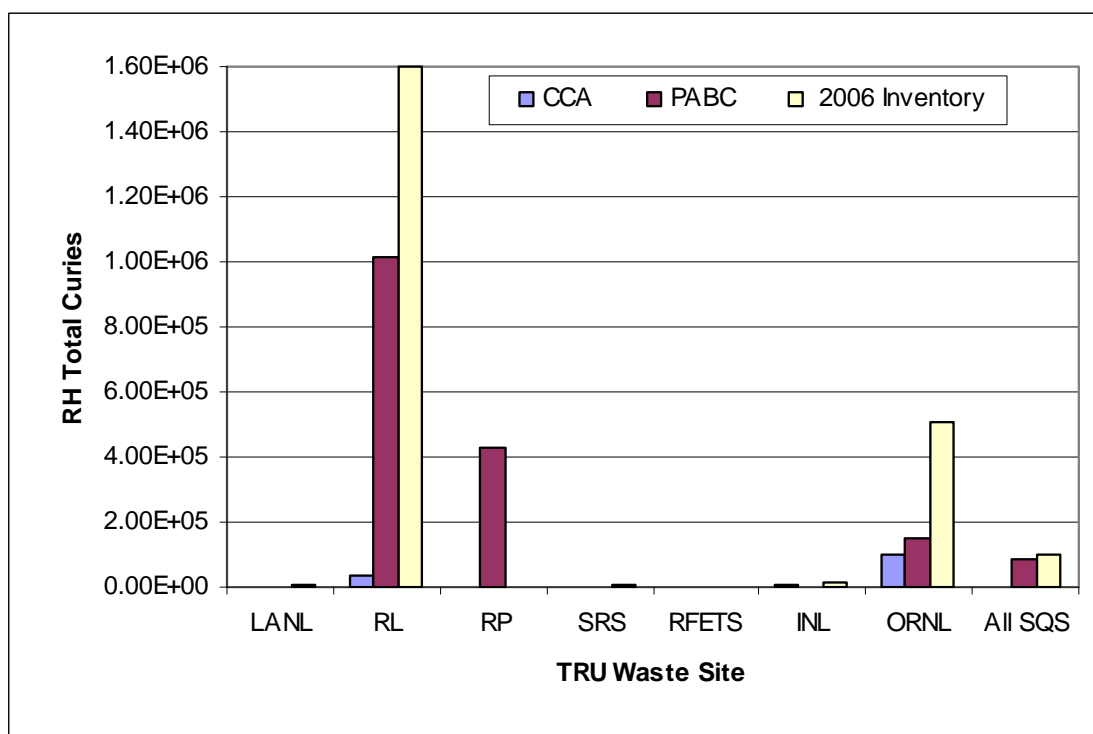
| Site <sup>1</sup>                                   | Total CH Curies <sup>2</sup> | Total RH Curies <sup>2</sup> |
|---|------------------------------|------------------------------|
| Argonne National Laboratory East (ANLE)             | 7.36E+02                     | 6.97E+01                     |
| Argonne National Laboratory West (MFC)              | 2.48E+02                     | 4.08E+04                     |
| Bettis Atomic Power Laboratory (BAPL)               | 8.49E+01                     | 4.86E+04                     |
| Knolls Atomic Power Laboratory-NFS (KAPL-NFS)       | 3.00E+02                     | --                           |
| Knolls Atomic Power Laboratory-Schenectady (KAPL-S) | --                           | 3.18E+02                     |
| Lawrence Berkley Laboratory (LBL)                   | 2.72E-02                     | --                           |
| Lawrence Livermore National Laboratory (LLNL)       | 8.54E+04                     | --                           |
| Nevada Test Site (NTS)                              | 4.94E+03                     | --                           |
| Sandia National Laboratories – Albuquerque (SNL-A)  | 3.09E+02                     | 7.62E+03                     |
| U.S. Army Materiel Command (Army)                   | 5.13E-03                     | --                           |
| <b>Grand Totals</b>                                 | <b>9.20E+04</b>              | <b>9.74E+04</b>              |

<sup>1</sup>Only considers WIPP-bound waste.

<sup>2</sup>Decayed through 2006.



**Figure D-7. Comparison of Contact Handled Unscaled Curie Inventory by Site**



**Figure D-8. Comparison of Remote Handled Unscaled Curie Inventory by Site**

Tables D-11 and D-12 compare the highest radionuclide disposal activity concentrations of the 2006 Inventory to the CCA and the PABC for CH- and RH-TRU radionuclides, respectively. The data presented in the table are presented graphically in Figures D-9 and D-10 for CH- and RH-TRU radionuclides, respectively. Generally, the radionuclide activity concentration for the majority of the radionuclides reported in the 2006 Inventory is higher than in the CCA and PABC due to a concerted effort to obtain more information on radionuclides for the 2006 Inventory by performing data checks on radionuclides reported by the sites.

**Table D-11. Comparison of CH-TRU Highest Radionuclide Disposal Activity Concentrations for the 2006 Inventory to CCA and PABC Radionuclides**

| Radionuclide | CCA <sup>1</sup><br>(Ci/m <sup>3</sup> ) | PABC <sup>2</sup><br>(Ci/m <sup>3</sup> ) | 2006 Inventory <sup>3</sup><br>(Ci/m <sup>3</sup> ) |
|--------------|--|---|---|
| Am-241       | 2.62E+00                                 | 2.82E+00                                  | 2.76E+00  |
| Ba-137m      | 4.53E-02                                 | 4.11E-02                                  | 4.50E-02  |
| Cm-244       | 1.87E-01                                 | 3.66E-02                                  | 4.53E-02  |
| Cs-137       | 4.78E-02                                 | 4.38E-02                                  | 4.84E-02  |
| Eu-154       | 6.80E-06                                 | 9.38E-06                                  | 1.91E+00  |
| Eu-155       | 5.62E-06                                 | 2.88E-07                                  | 1.29E+01  |
| Pu-238       | 1.55E+01                                 | 8.60E+00                                  | 1.26E+01  |
| Pu-239       | 4.66E+00                                 | 3.43E+00                                  | 3.19E+00  |
| Pu-240       | 1.25E+00                                 | 5.59E-01                                  | 7.79E-01  |
| Pu-241       | 1.37E+01                                 | 1.16E+01                                  | 1.13E+01  |

<sup>1</sup>Decayed through 1995.

<sup>2</sup>Decayed through 2001, additional precision is reflected in value.

<sup>3</sup>Decayed through 2006.

**Table D-12. Comparison of RH-TRU Highest Radionuclide Disposal Activity Concentrations for the 2006 Inventory to CCA and PABC Radionuclides**

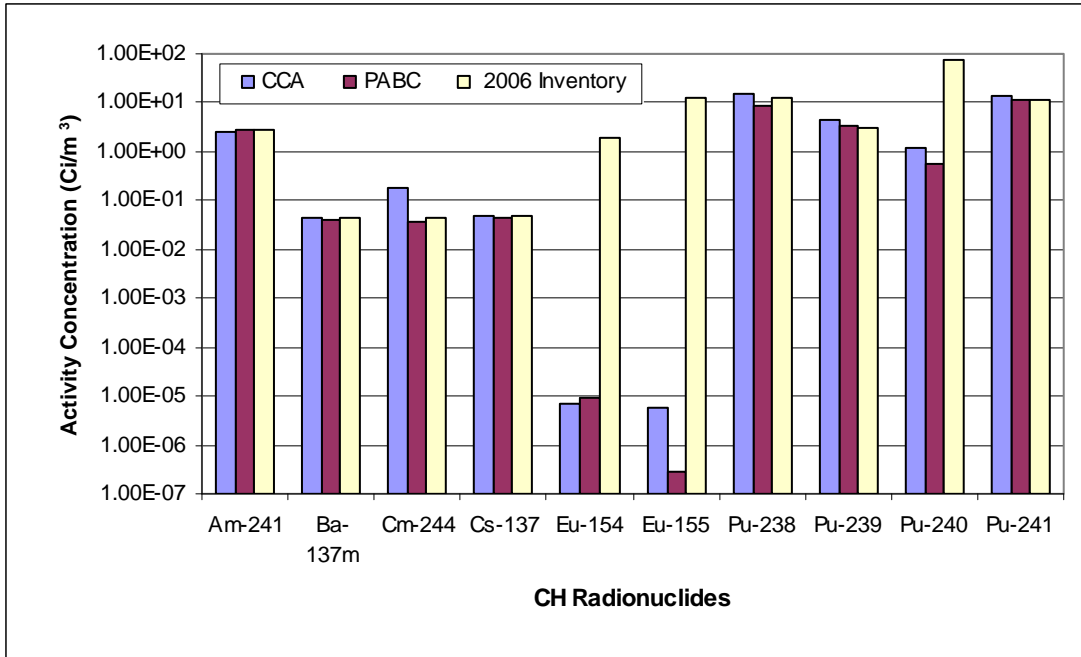
| Radionuclide | CCA <sup>1</sup><br>(Ci/m <sup>3</sup> ) | PABC <sup>2</sup><br>(Ci/m <sup>3</sup> ) | 2006 Inventory <sup>3</sup><br>(Ci/m <sup>3</sup> ) |
|--------------|--|---|---|
| Am-241       | 8.42E-01                                 | 1.95E+00                                  | 3.94E+00  |
| Ba-137m      | 2.89E+01                                 | 5.56E+01                                  | 5.26E+01  |
| Cm-244       | 4.45E-02                                 | 1.54E-01                                  | 1.23E+00  |
| Cs-137       | 3.05E+01                                 | 6.02E+01                                  | 4.79E+02  |
| Eu-152       | 1.73E-01                                 | 3.34E-01                                  | 3.20E+00  |
| Pu-238       | 2.05E-01                                 | 5.38E-01                                  | 1.32E+00  |
| Pu-239       | 1.45E+00                                 | 7.41E-01                                  | 1.10E+00  |
| Pu-241       | 2.00E+01                                 | 1.84E+01                                  | 3.23E+01  |
| Sr-90        | 2.95E+01                                 | 4.55E+01                                  | 3.78E+02  |
| Y-90         | 2.95E+01                                 | 4.48E+01                                  | 7.84E+01  |

<sup>1</sup>Decayed through 1995.

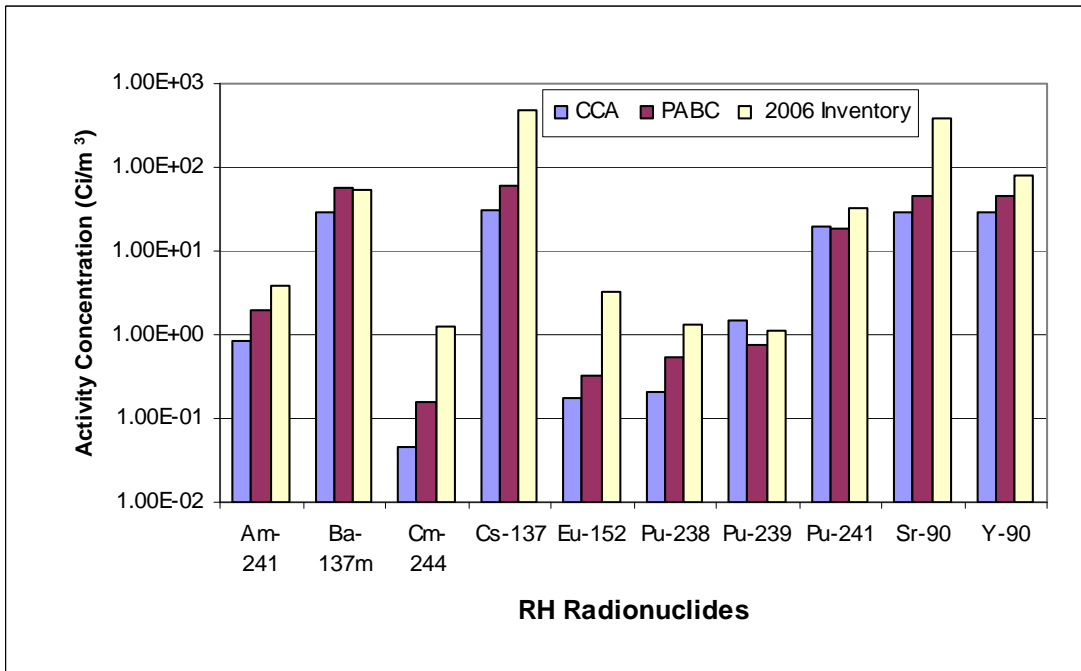
<sup>2</sup>Decayed through 2001, additional precision is reflected in value.

<sup>3</sup>Decayed through 2006.





**Figure D-9. Comparison of CH-TRU Highest Radionuclide Disposal Activity Concentrations for the 2006 Inventory to CCA and PABC Radionuclides**



**Figure D-10. Comparison of RH-TRU Highest Radionuclide Disposal Activity Concentrations (Ci/m³) for the 2006 Inventory to CCA and PABC Radionuclides**

Table D-13 presents a comparison of the total unscaled activity (CH and RH) of 29 PA radionuclides decayed through 2033, the closure year of the WIPP. The data for the CCA and PABC are obtained from Table 14 of Leigh, et al. (2005a). Eight radionuclides with 1000 Ci or greater increases since the PABC are Am-241, Cs-137, Pu-238, Pu-239, Pu-240, Pu-241, Pu-244, and Sr-90. The increases in Am-241 come primarily from the Rocky Flats and Idaho CH waste streams and the Hanford RL 325 RH laboratory waste stream. The Pu isotopes come from LANL Technical Area 55 operations, Pu-238 comes from SRS W027 waste streams, and the Cs137/Sr-90 primarily comes from the treatment of RH waste at the Hanford RL Waste Treatment Plant.

**Table D-13. Comparison of the Unscaled Activity of 29 PA Radionuclides Decayed through 2033 WIPP Closure**

| Radionuclide | CCA (Ci) | PABC (Ci) | 2006 Inventory (Ci) <sup>1</sup> |
|--------------|----------|-----------|----------------------------------|
| Ac-227       | 5.05E-01 | 6.86E-01  | 1.84E+01                         |
| Am-241       | 4.88E+05 | 5.17E+05  | 4.39E+05                         |
| Am-243       | 3.25E+01 | 7.87E+01  | 6.75E+01                         |
| C-14         | 1.28E+01 | 2.41E+00  | 3.81E+00                         |
| Cm-243       | 2.07E+01 | 4.14E-01  | 4.99E+01                         |
| Cm-244       | 7.44E+03 | 2.13E+03  | 2.58E+03                         |
| Cm-245       | 1.15E-02 | 1.71E-02  | 6.62E-01                         |
| Cm-248       | 3.72E-02 | 7.43E-02  | 4.88E-02                         |
| Cs-137       | 9.31E+04 | 2.07E+05  | 4.00E+05                         |
| Np-237       | 6.49E+01 | 1.22E+01  | 2.56E+01                         |
| Pa-231       | 4.67E-01 | 8.69E-01  | 3.98E-01                         |
| Pb-210       | 8.75E+00 | 3.59E+00  | 1.53E+00                         |
| Pu-238       | 1.94E+06 | 1.13E+06  | 1.20E+06                         |
| Pu-239       | 7.95E+05 | 5.82E+05  | 4.78E+05                         |
| Pu-240       | 2.14E+05 | 9.54E+04  | 1.13E+05                         |
| Pu-241       | 3.94E+05 | 4.48E+05  | 4.91E+05                         |
| Pu-242       | 1.17E+03 | 1.27E+01  | 3.96E+01                         |
| Pu-244       | 1.51E-06 | 5.53E-03  | 3.03E-04                         |
| Ra-226       | 1.14E+01 | 4.56E+00  | 1.89E+00                         |
| Sr-90        | 8.73E+04 | 1.76E+05  | 3.39E+05                         |
| Th-229       | 9.97E+00 | 5.21E+00  | 9.38E+00                         |
| Th-230       | 3.06E-01 | 1.80E-01  | 2.04E-01                         |
| Th-232       | 1.01E+00 | 3.42E+00  | 4.98E+00                         |
| U-232        | 1.79E+01 | 1.02E+01  | 2.91E+01                         |
| U-233        | 1.95E+03 | 1.23E+03  | 1.06E+03                         |
| U-234        | 7.51E+02 | 3.44E+02  | 2.92E+02                         |
| U-235        | 1.75E+01 | 5.01E+00  | 1.01E+01                         |
| U-236        | 6.72E-01 | 2.87E+00  | 1.53E+00                         |
| U-238        | 5.01E+01 | 2.17E+02  | 1.14E+02                         |

<sup>1</sup>Data Source: CID Data Version D.6.06\_0Y.

Table D-14 lists the TRU alpha radionuclides, their respective atomic numbers, and their associated half-lives. A TRU radionuclide, as defined by the LWA (U.S. Congress 1992), is an alpha-emitting radionuclide with an atomic number greater than 92 and half-life greater than 20 years.

**Table D-14. TRU Alpha Radionuclides**

| TRU Radionuclide | Atomic Number | Alpha Emitter | Half-Life (Years) | TRU Radionuclide | Atomic Number | Alpha Emitter | Half-Life (Years) |
|------------------|---------------|---------------|-------------------|------------------|---------------|---------------|-------------------|
| Am-241           | 95            | Yes           | 4.32E+02          | Cm-247           | 96            | Yes           | 1.56E+07          |
| Am-242m          | 95            | Yes           | 1.52E+02          | Cm-248           | 96            | Yes           | 3.39E+05          |
| Am-243           | 95            | Yes           | 7.38E+03          | Cm-250           | 96            | Yes           | 6.90E+03          |
| Bk-247           | 97            | Yes           | 1.38E+03          | Np-237           | 93            | Yes           | 2.14E+06          |
| Cf-249           | 98            | Yes           | 3.51E+02          | Pu-238           | 94            | Yes           | 8.78E+01          |
| Cf-251           | 98            | Yes           | 9.00E+02          | Pu-239           | 94            | Yes           | 2.41E+04          |
| Cm-243           | 96            | Yes           | 2.85E+01          | Pu-240           | 94            | Yes           | 6.57E+03          |
| Cm-245           | 96            | Yes           | 8.50E+03          | Pu-242           | 94            | Yes           | 3.76E+03          |
| Cm-246           | 96            | Yes           | 4.75E+03          | Pu-244           | 94            | Yes           | 8.26E+07          |

The sites reported 17 of the 18 TRU alpha radionuclides listed in Table D-14 for the 2006 Inventory (LANL 2008). The sites with the highest total unscaled TRU alpha activity are Hanford RL, INL, LANL, and ORNL (RFETS is entirely emplaced in the WIPP and also showed some increased activity). Table D-15 gives the sum of all TRU alpha radionuclides by site. Figure D-11 is a graphical representation of the total TRU alpha curies at each of the sites for both CH- and RH-TRU waste.

**Table D-15. 2006 Unscaled CH- and RH-TRU Alpha Radionuclides Curies by Site**

| Site <sup>1</sup>                                   | CH Activity <sup>2</sup> (Ci) | RH Activity <sup>2</sup> (Ci) | Total Activity <sup>2</sup> (Ci) |
|---|-------------------------------|-------------------------------|----------------------------------|
| Argonne National Laboratory - East (ANL-E)          | 5.22E+02                      | 1.45E+01                      | 5.37E+02                         |
| Argonne National Laboratory - West (MFC)            | 1.99E+02                      | 2.39E+01                      | 2.23E+02                         |
| U.S. Army Materiel Command (Army)                   | 5.09E-03                      | --                            | 5.09E-03                         |
| Bettis Atomic Power Laboratory (BAPL)               | 9.27E-01                      | 2.94E+02                      | 2.94E+02                         |
| Hanford Richland Operations (RL)                    | 2.13E+05                      | 2.00E+04                      | 2.33E+05                         |
| Idaho National Laboratory (INL)                     | 3.58E+05                      | 7.57E+03                      | 3.66E+05                         |
| Knolls Atomic Power Laboratory - NFS (KAPL-NFS)     | 1.71E+02                      | --                            | 1.71E+02                         |
| Knolls Atomic Power Laboratory-Schenectady (KAPL-S) | --                            | 3.25E+00                      | 3.25E+00                         |
| Los Alamos National Laboratory (LANL)               | 3.63E+05                      | 2.51E+02                      | 3.63E+05                         |
| Lawrence Berkley Laboratory (LBL)                   | 1.99E-02                      | --                            | 1.99E-02                         |
| Lawrence Livermore National Laboratory (LLNL)       | 7.89E+03                      | --                            | 7.89E+03                         |
| Nevada Test Site (NTS)                              | 2.51E+03                      | --                            | 2.51E+03                         |
| Oak Ridge National Laboratory (ORNL)                | 8.11E+03                      | 3.64E+03                      | 1.18E+04                         |
| Rocky Flats Environmental Technology Site (RFETS)   | 4.06E+05                      | --                            | 4.06E+05                         |
| Sandia National Laboratories-Albuquerque (SNL-A)    | 2.08E+01                      | 1.22E+02                      | 1.43E+02                         |
| Savannah River Site (SRS)                           | 1.10E+06                      | 1.69E+02                      | 1.10E+06                         |
| <b>Totals</b>                                       | <b>2.46E+06</b>               | <b>3.21E+04</b>               | <b>2.49E+06</b>                  |

<sup>1</sup>Only considers WIPP-bound waste.

<sup>2</sup>Decayed through 2006.

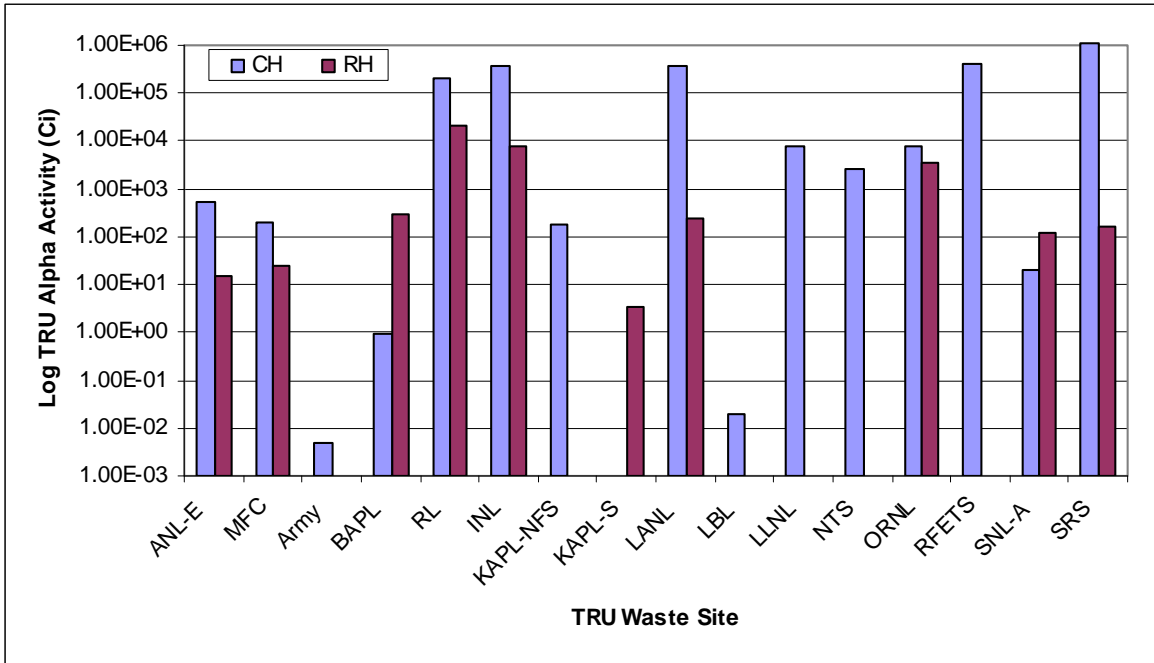


Figure D-11. 2006 Unscaled CH- and RH-TRU Alpha Radionuclides Curies by Site

Tables D-16 and D-17 compare the unscaled TRU alpha radionuclide activities of the 2006 Inventory to the CCA and the PABC. The data presented in the tables are presented graphically in Figures D-12 and D-13 for CH- and RH-TRU radionuclides, respectively. The CH- and RH-TRU alpha curies are higher for LANL because of new characterization data and restructuring of database information. Increases in total TRU curies at Hanford RL are due to the use of production (characterization) data. The RFETS waste streams have increased CH-TRU curies, based on the waste characterization data reported in WWIS. All of the RFETS CH-TRU waste has been emplaced at the WIPP.

**Table D-16. Unscaled CH-TRU Alpha Radionuclide Curie Comparisons**

| Site <sup>1</sup>                                 | CCA <sup>2</sup><br>(Ci) | PABC <sup>3</sup><br>(Ci) | 2006 Inventory <sup>4</sup><br>(Ci) |
|---|--------------------------|---------------------------|-------------------------------------|
| Los Alamos National Laboratory (LANL)             | 2.02E+05                 | 1.07E+05                  | 3.63E+05                            |
| Hanford Richland Operations (RL)                  | 1.18E+05                 | 2.00E+05                  | 2.13E+05                            |
| Hanford Office of River Protection (RP)           | --                       | 4.06E+03                  | --                                  |
| Savannah River Site (SRS)                         | 5.02E+05                 | 1.23E+06                  | 1.10E+06                            |
| Rocky Flats Environmental Technology Site (RFETS) | 3.82E+05                 | 3.69E+05                  | 4.06E+05                            |
| Idaho National Laboratory (INL)                   | 2.00E+05                 | 4.39E+05                  | 3.58E+05                            |
| Oak Ridge National Laboratory (ORNL)              | 7.08E+03                 | 1.04E+04                  | 8.11E+03                            |
| All SQS   | 5.93E+03                 | 1.39E+04                  | 1.13E+04                            |
| <b>Total</b>                                      | <b>1.42E+06</b>          | <b>2.37E+06</b>           | <b>2.46E+06</b>                     |

<sup>1</sup>Only considers WIPP-bound waste.

<sup>2</sup>Decayed through 1995.

<sup>3</sup>Decayed through 2001, value reflects emplaced activity not addressed in Revision 0.

<sup>4</sup>Decayed through 2006.

**Table D-17. Unscaled RH-TRU Alpha Radionuclide Curie Comparisons**

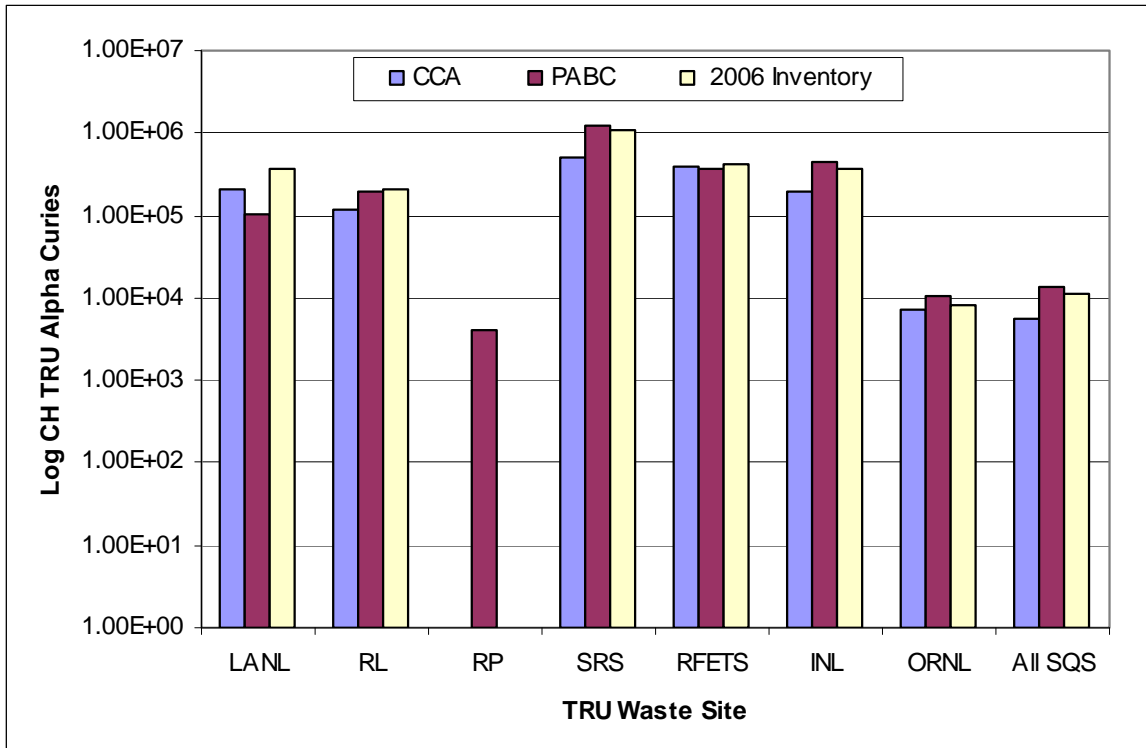
| Site <sup>1</sup>                                 | CCA <sup>2</sup><br>(Ci) | PABC <sup>3</sup><br>(Ci) | 2006 Inventory <sup>4</sup><br>(Ci) |
|---|--------------------------|---------------------------|-------------------------------------|
| Los Alamos National Laboratory (LANL)             | 9.67E+01                 | 2.59E+00                  | 2.51E+02                            |
| Hanford Richland Operations (RL)                  | 7.42E+02                 | 3.92E+03                  | 2.00E+04                            |
| Hanford Office of River Protection (RP)           | --                       | 1.66E+04                  | --                                  |
| Savannah River Site (SRS)                         | 8.91E+00                 | 5.86E+01                  | 1.69E+02                            |
| Rocky Flats Environmental Technology Site (RFETS) | --                       | --                        | --                                  |
| Idaho National Laboratory (INL)                   | 1.49E+02                 | 2.80E+03                  | 7.57E+03                            |
| Oak Ridge National Laboratory (ORNL)              | 5.25E+02                 | 7.44E+02                  | 3.64E+03                            |
| All SQS   | 2.49E+01                 | 6.09E+02                  | 4.57E+02                            |
| <b>Total</b>                                      | <b>1.55E+03</b>          | <b>2.48E+04</b>           | <b>3.21E+04</b>                     |

<sup>1</sup>Only considers WIPP-bound waste.

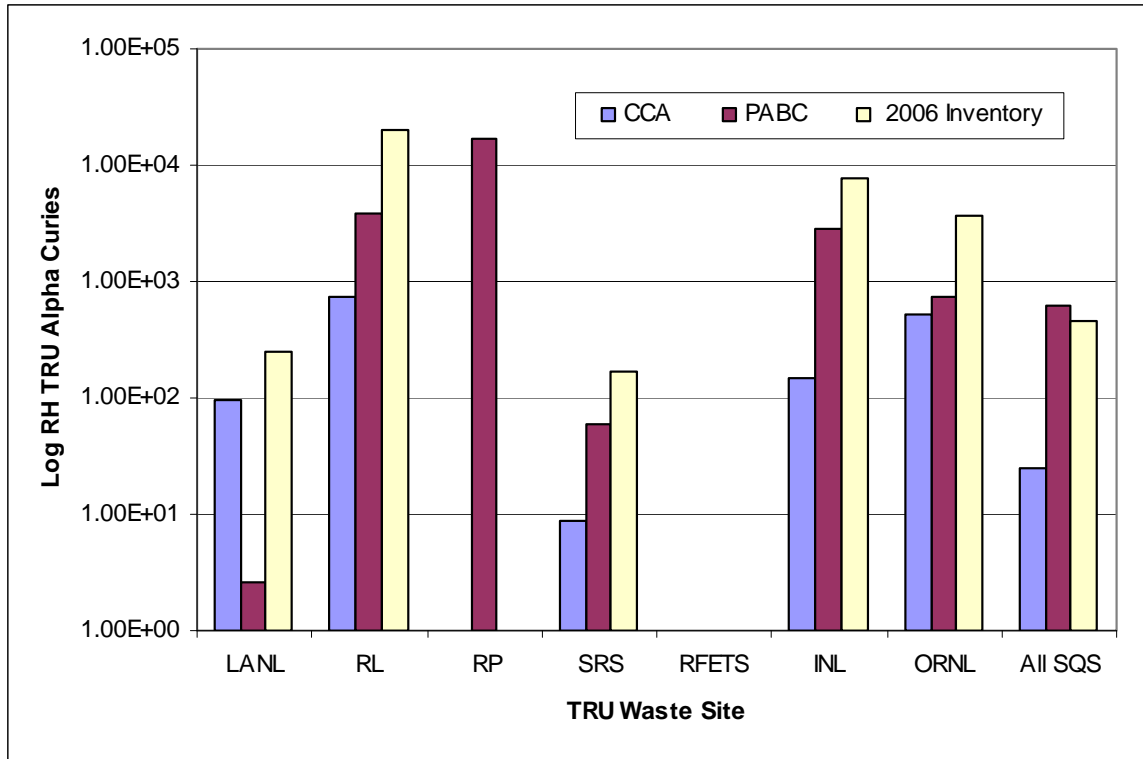
<sup>2</sup>Decayed through 1995.

<sup>3</sup>Decayed through 2001, value reflects emplaced activity not addressed in Revision 0.

<sup>4</sup>Decayed through 2006.



**Figure D-12. Unscaled CH-TRU Alpha Radionuclide Curie Comparisons**



**Figure D-13. Unscaled RH-TRU Alpha Radionuclide Curie Comparisons**

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**APPENDIX E**

**CH and RH Scaled Volumes and Activities**



## Introduction

This appendix consists of 14 tables that provide the decayed contact-handled (CH) and remote-handled (RH) radionuclide inventory by waste stream planned for emplacement in the Waste Isolation Pilot Plant (WIPP) (included in Appendix A) as well as the WIPP emplaced waste (included in Appendix B). The volumes and activities in Tables E - 1 through E - 14 have been scaled to a full repository in accordance with INV-AP-01, *Analysis Plan for Transuranic Inventory* (LANL 2006a). These tables are similar to those in the Transuranic Waste Baseline Inventory Report (TWBIR), Revision 3 (DOE 1996a Appendix B, Table 1), and the TWBIR-2004 (DOE 2006c, Appendix E).

The tables contain all waste streams reported in the CID Data Version D.6.06 (LANL 2008), and curie activity in each waste stream for 20 PA waste-stream-level radionuclides specified by Sandia National Laboratories – Carlsbad Programs Group (SNL-CPG) (Dunagan 2007). The projected volume has been scaled (using the scaling factors found in section 2.2.1 of the main body of this report) in each waste stream such that the sum of all waste stream volumes equals a full WIPP repository for CH and RH waste. The radionuclides have been decayed to December 31 of calendar years 2006, 2033, 2133, 2383, 3033, 7033, and 12033.

Three short half-life radionuclides (Cm-244, Cs-137, and Sr-90) completely decay away by the five-thousand-year decay period for both the CH and RH waste streams.

Emplaced waste streams are identified with a “-S” suffix appended to the end of waste stream ID. These waste streams were compiled from WIPP Waste Information System data (WWIS) (see Van Soest 2007b for detailed description of WWIS data transformations).

Section 3.1.1 of the main body of this report gives the emplaced volumes by site and handling as of December 31, 2006.



















Table E-2. RH Scaled Volumes (m3) and Activities (Ci) for PA Waste-Stream Level Radionuclides Decayed through 2006

DOE/TRU-2008-3379, Revision 1

| Site Code          | Waste Stream ID     | Scaled Volume  | Am-241          | Am-243          | Cm-244          | Cs-137          | Np-237          | Pu-238          | Pu-239          | Pu-240          | Pu-241          | Pu-242          | Pu-244          | Sr-90           | Th-229          | Th-230          | Th-232          | U-233           | U-234           | U-235           | U-236           | U-238           |
|--------------------|---------------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| SR                 | SR-BCLRH-T006       | 0.89           | 9.11E-01        | 6.38E-03        | 6.12E-01        | 1.59E+01        | 7.79E-05        | 8.02E-01        | 1.06E-01        | 1.73E-01        | 1.20E+01        | 5.16E-04        | --              | 1.04E+01        | 2.72E-12        | 8.02E-09        | 8.44E-15        | 1.02E-08        | 3.01E-04        | 4.31E-06        | 5.70E-05        | 8.34E-05        |
| SR                 | SR-BCLRH-T007       | 0.89           | 7.53E-03        | 5.26E-05        | 5.06E-03        | 1.31E-01        | 6.42E-07        | 6.62E-03        | 8.71E-04        | 1.43E-03        | 9.94E-02        | 4.24E-06        | --              | 8.62E-02        | 2.24E-14        | 6.63E-11        | 6.96E-17        | 8.38E-11        | 2.49E-06        | 3.56E-08        | 4.70E-07        | 6.89E-07        |
| SR                 | SR-BCLRH-T008       | 0.89           | 8.97E-02        | 6.28E-04        | 6.05E-02        | 1.57E+00        | 7.66E-06        | 7.92E-02        | 1.04E-02        | 1.70E-02        | 1.19E+00        | 5.07E-05        | --              | 1.03E+00        | 2.67E-13        | 7.92E-10        | 8.32E-16        | 9.98E-10        | 2.97E-05        | 4.25E-07        | 5.62E-06        | 8.23E-06        |
| SR                 | SR-BCLRH-T009       | 1.78           | 6.04E-01        | 4.24E-03        | 4.06E-01        | 1.06E+01        | 5.17E-05        | 5.34E-01        | 7.01E-02        | 1.15E-01        | 7.95E+00        | 3.42E-04        | --              | 6.91E+00        | 1.81E-12        | 5.35E-09        | 5.62E-15        | 6.76E-09        | 2.00E-04        | 2.85E-06        | 3.79E-05        | 5.54E-05        |
| SR                 | SR-BCLRH-T010       | 0.89           | 4.97E+00        | 6.97E-02        | 3.26E+00        | 6.68E+02        | 4.47E-03        | 1.52E-02        | 1.28E-03        | 1.67E-02        | 1.52E-01        | 9.65E-06        | --              | 3.60E+02        | 1.30E-10        | 1.47E-10        | 1.56E-16        | 4.91E-07        | 5.51E-06        | 4.85E-08        | 1.05E-06        | 1.29E-06        |
| SR                 | SR-BCLRH-T011       | 3.56           | 4.75E-02        | --              | 1.70E-02        | 5.35E-01        | 4.63E-08        | 2.75E-02        | 1.06E-02        | 5.73E-06        | --              | --              | --              | 2.88E-01        | 2.84E-17        | 5.49E-10        | 1.30E-23        | 3.03E-13        | 2.05E-05        | 3.14E-11        | 2.60E-13        | --              |
| SR                 | SR-T003-773A-HET    | 140.96         | --              | 2.58E-01        | --              | 2.92E+02        | --              | 2.04E+01        | 1.18E-04        | --              | --              | --              | --              | 2.89E+02        | --              | 1.16E-07        | --              | --              | 1.25E-03        | 9.54E-13        | --              | --              |
| SR                 | SR-W027-SRSG-HET-RH | 102.78         | 9.23E+00        | 4.57E+00        | 1.50E+02        | --              | 3.32E-02        | 1.50E+01        | 2.16E+01        | 7.48E+00        | 5.77E+01        | 2.33E-03        | 7.19E-13        | --              | 5.68E-09        | 1.88E-07        | 4.32E-15        | 4.18E-06        | 1.39E-03        | 6.19E-07        | 6.14E-06        | 1.02E-11        |
| <b>Grand Total</b> |                     | <b>7079.00</b> | <b>2.79E+04</b> | <b>6.33E+00</b> | <b>8.70E+03</b> | <b>3.39E+06</b> | <b>4.88E+00</b> | <b>9.36E+03</b> | <b>7.80E+03</b> | <b>1.53E+03</b> | <b>2.29E+05</b> | <b>1.16E+00</b> | <b>5.99E-10</b> | <b>2.67E+06</b> | <b>2.73E+01</b> | <b>5.41E-02</b> | <b>7.48E+00</b> | <b>9.34E+02</b> | <b>8.08E+01</b> | <b>3.75E+00</b> | <b>5.91E-01</b> | <b>1.30E+02</b> |

















Table E-3. CH Scaled Volumes (m3) and Activities (Ci) for PA Waste-Stream Level Radionuclides Decayed through 2033

| Site Code          | Waste Stream ID      | Scaled Volume    | Am-241          | Am-243          | Cm-244          | Cs-137          | Np-237          | Pu-238          | Pu-239          | Pu-240          | Pu-241          | Pu-242          | Pu-244          | Sr-90           | Th-229          | Th-230          | Th-232          | U-233           | U-234           | U-235           | U-236           | U-238           |
|--------------------|----------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| SR                 | SR-W027-221F-HET     | 1490.34          | 3.77E+03        | --              | --              | --              | 2.98E-02        | 3.29E+03        | 7.15E+03        | 1.63E+03        | 1.90E+04        | 9.24E-01        | --              | --              | 1.53E-09        | 4.44E-05        | 1.08E-12        | 1.75E-06        | 3.16E-01        | 2.12E-04        | 1.46E-03        | 1.48E-05        |
| SR                 | SR-W027-221F-HETA-S  | 2080.85          | 7.59E+02        | 4.43E-06        | --              | 2.55E-01        | 1.42E-02        | 1.61E+02        | 1.69E+03        | 5.55E+02        | 2.89E+03        | 9.28E-02        | --              | 6.80E-05        | 4.87E-05        | 6.91E-05        | 9.95E-05        | 1.73E-02        | 2.63E-01        | 1.69E-04        | 4.94E-04        | 2.17E-03        |
| SR                 | SR-W027-221H-HEPA    | 137.97           | 1.68E+01        | --              | --              | --              | 5.16E-02        | 1.22E+04        | 1.61E+01        | 7.04E+00        | 1.01E+02        | 7.03E-03        | --              | --              | 7.64E-09        | 1.32E-04        | 1.36E-12        | 6.04E-06        | 1.05E+00        | 8.21E-05        | 1.02E-03        | 3.25E-06        |
| SR                 | SR-W027-221H-HET-A   | 5568.93          | 4.78E+02        | 6.11E-04        | --              | 2.45E+01        | 1.62E+01        | 4.43E+05        | 1.34E+03        | 5.16E+02        | 3.72E+03        | 3.01E-01        | --              | 2.40E+01        | 3.30E-05        | 6.17E-03        | 1.60E-10        | 1.32E-02        | 4.34E+01        | 4.90E-02        | 1.12E-01        | 1.17E-02        |
| SR                 | SR-W027-221H-HET-S   | 2521.93          | 1.93E+02        | 2.04E-02        | --              | 5.71E-03        | 2.09E-01        | 3.07E+04        | 1.30E+02        | 5.11E+01        | 1.39E+03        | 2.45E-02        | --              | 5.60E-03        | 2.46E-04        | 2.15E-03        | 2.73E-03        | 9.05E-02        | 9.63E+00        | 1.56E-03        | 4.40E-05        | 2.49E-03        |
| SR                 | SR-W027-235F-HET     | 733.92           | 7.48E+02        | --              | --              | --              | 5.14E+00        | 1.88E+05        | 2.57E+02        | 1.24E+02        | 8.01E+03        | 2.94E-01        | --              | --              | 8.83E-07        | 2.23E-03        | 2.14E-11        | 6.49E-04        | 1.69E+01        | 1.33E-03        | 1.55E-02        | 1.39E-03        |
| SR                 | SR-W027-235F-HET-S   | 301.51           | 2.25E+01        | 1.11E-05        | --              | 8.62E-05        | 3.61E-02        | 1.74E+03        | 9.64E+00        | 6.52E+00        | 1.07E+02        | 3.36E-03        | --              | 8.45E-05        | 5.73E-09        | 1.25E-04        | 2.51E-04        | 4.37E-06        | 5.69E-01        | 7.53E-04        | 5.42E-06        | 9.01E-05        |
| SR                 | SR-W027-235F-HOMO    | 5.83             | 1.31E+00        | --              | --              | --              | 1.47E-05        | 9.59E+02        | 9.37E-01        | 5.08E-01        | 3.65E+00        | 6.02E-04        | --              | --              | 1.47E-12        | 2.70E-05        | 6.57E-16        | 1.21E-09        | 1.35E-01        | 3.88E-08        | 6.34E-07        | 3.82E-12        |
| SR                 | SR-W027-773A-HET     | 2495.78          | 7.20E+01        | 3.48E+01        | 1.20E+03        | 4.31E+02        | 4.03E-04        | 1.54E+04        | 3.24E+02        | 9.35E+01        | 7.78E+02        | 1.02E+00        | 1.25E-10        | 4.23E+02        | 1.24E-04        | 1.91E-04        | 8.24E-04        | 4.74E-02        | 1.42E+00        | 1.41E-03        | 8.31E-03        | 2.99E-03        |
| SR                 | SR-W027-773A-HET-S   | 358.24           | 4.29E+01        | 2.49E-01        | 4.70E+00        | 1.18E-02        | 3.45E-02        | 1.49E+03        | 9.03E+01        | 2.20E+01        | 1.21E+02        | 2.37E-03        | --              | 1.16E-02        | 5.46E-09        | 1.00E-04        | 1.31E-04        | 4.17E-06        | 4.61E-01        | 1.72E-04        | 1.83E-05        | 1.50E-03        |
| SR                 | SR-W027-999-AGNS-HET | 56.84            | 4.04E+00        | --              | --              | --              | 5.36E-03        | 2.73E+00        | 6.50E+00        | 1.95E+00        | 7.85E+00        | 2.39E-04        | --              | --              | 3.04E-09        | 3.33E-07        | 2.07E-13        | 1.23E-06        | 9.34E-04        | 1.73E-05        | 8.07E-05        | 2.47E-07        |
| SR                 | SR-W027-999-AGNS-HOM | 5.83             | 1.53E+01        | --              | --              | --              | 3.26E-03        | 2.36E+00        | 6.07E+00        | 1.42E+00        | 5.04E+00        | 2.46E-04        | --              | --              | 1.76E-09        | 2.97E-07        | 2.93E-15        | 7.22E-07        | 8.28E-04        | 1.97E-05        | 2.24E-06        | 4.14E-04        |
| SR                 | SR-W027-999-LASL-HET | 44.30            | 1.84E+02        | --              | --              | --              | 3.19E-03        | 4.65E+04        | 5.31E+01        | 3.35E+01        | 1.81E+02        | 3.85E-02        | --              | --              | 6.98E-10        | 3.06E-03        | 9.15E-14        | 3.90E-07        | 1.03E+01        | 3.20E-06        | 6.07E-05        | 3.55E-10        |
| SR                 | SR-W027-999-LASL-HOM | 5.82             | 1.85E+01        | --              | --              | --              | 3.22E-04        | 1.04E+04        | 1.16E+01        | 6.37E+00        | 1.82E+01        | 7.57E-03        | --              | --              | 7.03E-11        | 6.87E-04        | 1.74E-14        | 3.93E-08        | 2.32E+00        | 7.00E-07        | 1.15E-05        | 6.97E-11        |
| SR                 | SR-W027-999-MD-HET   | 1675.12          | 4.14E+02        | --              | 5.44E-04        | --              | 7.30E-03        | 3.24E+05        | 3.91E+02        | 2.08E+02        | 6.41E+02        | 2.38E-01        | 7.92E-15        | --              | 2.25E-04        | 2.13E-02        | 5.70E-13        | 3.95E-02        | 7.20E+01        | 2.31E-04        | 3.78E-04        | 4.59E-03        |
| SR                 | SR-W027-999-MD-HOM-A | 2.29             | 3.31E-02        | --              | --              | --              | 2.80E-05        | 2.45E+01        | 2.10E-02        | 1.68E-03        | 6.00E-03        | 9.78E-08        | --              | --              | 1.70E-11        | 1.58E-06        | 3.73E-18        | 6.62E-09        | 5.42E-03        | 3.26E-07        | 2.74E-09        | 4.23E-16        |
| SR                 | SR-W027-999-MD-HOM-B | 22.64            | 3.27E-01        | --              | --              | --              | 2.77E-04        | 2.42E+02        | 2.08E-01        | 1.66E-02        | 5.94E-02        | 9.68E-07        | --              | --              | 1.68E-10        | 1.57E-05        | 3.69E-17        | 6.55E-08        | 5.36E-02        | 3.22E-06        | 2.71E-08        | 4.19E-15        |
| SR                 | SR-W027-999-MD-HOM-C | 1.04             | 1.50E-02        | --              | --              | --              | 1.27E-05        | 1.11E+01        | 9.56E-03        | 7.62E-04        | 2.73E-03        | 4.45E-08        | --              | --              | 7.72E-12        | 7.20E-07        | 1.69E-18        | 3.01E-09        | 2.46E-03        | 1.48E-07        | 1.25E-09        | 1.92E-16        |
| SR                 | SR-W027-999-MD-SOIL  | 90.53            | 3.93E-02        | --              | --              | --              | 1.24E-04        | 1.28E+01        | 5.38E-01        | --              | --              | 1.83E-08        | --              | --              | 7.62E-11        | 6.65E-07        | --              | 2.96E-08        | 2.51E-03        | 2.92E-08        | --              | 7.90E-17        |
| SR                 | SR-W027-FB-PRE86-C-S | 2385.10          | 6.48E+02        | 1.13E-04        | 3.56E-02        | 9.23E-05        | 1.29E-02        | 1.29E+02        | 3.32E+03        | 4.45E+02        | 1.90E+03        | 2.20E-01        | --              | 7.33E-05        | 9.97E-06        | 3.20E-05        | 6.22E-05        | 3.55E-03        | 1.25E-01        | 2.04E-04        | 3.97E-04        | 2.77E-04        |
| SR                 | SR-W027-HBL-Box-A    | 339.60           | 3.94E+00        | --              | --              | --              | 1.02E-01        | 2.88E+03        | 2.83E+00        | 1.54E+00        | 1.05E+01        | 1.82E-03        | --              | --              | 3.82E-08        | 8.54E-05        | 2.09E-15        | 1.90E-05        | 4.18E-01        | 1.20E-07        | 1.96E-06        | 1.18E-11        |
| SR                 | SR-W027-SRSG-HET     | 1889.08          | 9.05E+02        | 2.95E-02        | 4.30E-01        | --              | 1.10E+00        | 2.30E+03        | 1.74E+03        | 3.89E+02        | 1.25E+03        | 4.69E+00        | --              | --              | 2.39E-02        | 5.41E-03        | 8.74E-11        | 4.55E+00        | 1.10E+01        | 8.49E-03        | 3.19E-02        | 4.97E-01        |
| SR                 | SR-W027-SRSG-HOM     | 22.28            | 1.15E+01        | 1.24E-03        | 1.45E-02        | --              | 2.30E-02        | 1.21E+03        | 1.03E+02        | 1.38E+01        | 1.83E+01        | 1.05E-02        | --              | --              | 1.46E-08        | 7.12E-05        | 5.46E-13        | 5.57E-06        | 2.53E-01        | 3.00E-05        | 2.09E-04        | 5.35E-04        |
| <b>Grand Total</b> |                      | <b>168485.00</b> | <b>4.89E+05</b> | <b>9.24E+01</b> | <b>2.71E+03</b> | <b>4.37E+03</b> | <b>3.83E+01</b> | <b>1.71E+06</b> | <b>5.38E+05</b> | <b>1.31E+05</b> | <b>5.19E+05</b> | <b>5.69E+01</b> | <b>3.19E-04</b> | <b>1.25E+03</b> | <b>3.27E+00</b> | <b>2.19E-01</b> | <b>1.45E+00</b> | <b>7.79E+02</b> | <b>3.77E+02</b> | <b>8.66E+00</b> | <b>1.96E+00</b> | <b>5.80E+01</b> |



| Site Code   | Waste Stream ID | Scaled Volume | Am-241   | Am-243   | Cm-244   | Cs-137   | Np-237   | Pu-238   | Pu-239   | Pu-240   | Pu-241   | Pu-242   | Pu-244   | Sr-90    | Th-229   | Th-230   | Th-232   | U-233    | U-234    | U-235    | U-236    | U-238    |
|-------------|-----------------|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Grand Total |                 | 7079.00       | 3.21E+04 | 6.31E+00 | 3.10E+03 | 1.82E+06 | 5.15E+00 | 7.56E+03 | 7.80E+03 | 1.54E+03 | 6.24E+04 | 1.16E+00 | 1.37E-09 | 1.41E+06 | 2.96E+01 | 7.38E-02 | 7.48E+00 | 9.34E+02 | 8.14E+01 | 3.76E+00 | 5.92E-01 | 1.30E+02 |

















Table E-5. CH Scaled Volumes (m3) and Activities (Ci) for PA Waste-Stream Level Radionuclides Decayed through 2133

| Site Code          | Waste Stream ID      | Scaled Volume    | Am-241          | Am-243          | Cm-244          | Cs-137          | Np-237          | Pu-238          | Pu-239          | Pu-240          | Pu-241          | Pu-242          | Pu-244          | Sr-90           | Th-229          | Th-230          | Th-232          | U-233           | U-234           | U-235           | U-236           | U-238           |
|--------------------|----------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| SR                 | SR-W027-221F-HET     | 1490.34          | 3.76E+03        | --              | --              | --              | 1.58E-01        | 1.49E+03        | 7.13E+03        | 1.62E+03        | 1.54E+02        | 9.24E-01        | --              | --              | 1.66E-07        | 6.57E-04        | 2.02E-11        | 4.28E-05        | 9.62E-01        | 9.16E-04        | 6.28E-03        | 1.48E-05        |
| SR                 | SR-W027-221F-HETA-S  | 2080.85          | 7.31E+02        | 4.39E-06        | --              | 2.53E-02        | 3.92E-02        | 7.32E+01        | 1.69E+03        | 5.49E+02        | 2.35E+01        | 9.28E-02        | --              | 6.29E-06        | 2.10E-04        | 3.22E-04        | 9.95E-05        | 1.73E-02        | 2.95E-01        | 3.35E-04        | 2.13E-03        | 2.17E-03        |
| SR                 | SR-W027-221H-HEPA    | 137.97           | 1.73E+01        | --              | --              | --              | 5.22E-02        | 5.54E+03        | 1.61E+01        | 6.97E+00        | 8.19E-01        | 7.03E-03        | --              | --              | 1.70E-07        | 2.29E-03        | 6.46E-12        | 2.87E-05        | 3.44E+00        | 8.37E-05        | 1.04E-03        | 3.25E-06        |
| SR                 | SR-W027-221H-HET-A   | 5568.93          | 5.16E+02        | 6.05E-04        | --              | 2.43E+00        | 1.62E+01        | 2.01E+05        | 1.33E+03        | 5.11E+02        | 3.02E+01        | 3.01E-01        | --              | 2.22E+00        | 1.89E-04        | 8.93E-02        | 7.16E-10        | 2.02E-02        | 1.30E+02        | 4.92E-02        | 1.13E-01        | 1.17E-02        |
| SR                 | SR-W027-221H-HET-S   | 2521.93          | 2.04E+02        | 2.02E-02        | --              | 5.67E-04        | 2.16E-01        | 1.39E+04        | 1.30E+02        | 5.06E+01        | 1.13E+01        | 2.45E-02        | --              | 5.18E-04        | 1.09E-03        | 1.39E-02        | 2.73E-03        | 9.05E-02        | 1.56E+01        | 1.57E-03        | 1.95E-04        | 2.49E-03        |
| SR                 | SR-W027-235F-HET     | 733.92           | 8.70E+02        | --              | --              | --              | 5.17E+00        | 8.54E+04        | 2.56E+02        | 1.23E+02        | 6.50E+01        | 2.93E-01        | --              | --              | 1.74E-05        | 3.62E-02        | 9.89E-11        | 2.90E-03        | 5.39E+01        | 1.35E-03        | 1.59E-02        | 1.39E-03        |
| SR                 | SR-W027-235F-HET-S   | 301.51           | 2.23E+01        | 1.10E-05        | --              | 8.55E-06        | 3.68E-02        | 7.89E+02        | 9.62E+00        | 6.45E+00        | 8.65E-01        | 3.36E-03        | --              | 7.82E-06        | 1.21E-07        | 8.09E-04        | 2.51E-04        | 2.02E-05        | 9.10E-01        | 7.53E-04        | 2.46E-05        | 9.01E-05        |
| SR                 | SR-W027-235F-HOMO    | 5.83             | 1.23E+00        | --              | --              | --              | 5.70E-05        | 4.35E+02        | 9.34E-01        | 5.02E-01        | 2.94E-02        | 6.02E-04        | --              | --              | 7.20E-11        | 2.44E-04        | 7.49E-15        | 1.70E-08        | 3.23E-01        | 1.31E-07        | 2.13E-06        | 1.29E-11        |
| SR                 | SR-W027-773A-HET     | 2495.78          | 8.40E+01        | 3.45E+01        | 2.61E+01        | 4.28E+01        | 3.18E-03        | 6.99E+03        | 3.23E+02        | 9.56E+01        | 6.66E+00        | 1.02E+00        | 5.72E-10        | 3.91E+01        | 5.66E-04        | 3.00E-03        | 8.24E-04        | 4.74E-02        | 4.44E+00        | 1.44E-03        | 8.59E-03        | 2.99E-03        |
| SR                 | SR-W027-773A-HET-S   | 358.24           | 4.01E+01        | 2.46E-01        | 1.02E-01        | 1.17E-03        | 3.59E-02        | 6.76E+02        | 9.00E+01        | 2.18E+01        | 9.82E-01        | 2.37E-03        | --              | 1.07E-03        | 1.16E-07        | 6.63E-04        | 1.31E-04        | 1.95E-05        | 7.53E-01        | 1.81E-04        | 8.33E-05        | 1.50E-03        |
| SR                 | SR-W027-999-AGNS-HET | 56.84            | 3.67E+00        | --              | --              | --              | 5.51E-03        | 1.24E+00        | 6.49E+00        | 1.93E+00        | 6.37E-02        | 2.39E-04        | --              | --              | 2.56E-08        | 1.44E-06        | 6.20E-13        | 3.60E-06        | 1.47E-03        | 1.79E-05        | 8.65E-05        | 2.47E-07        |
| SR                 | SR-W027-999-AGNS-HOM | 5.83             | 1.31E+01        | --              | --              | --              | 3.74E-03        | 1.07E+00        | 6.05E+00        | 1.41E+00        | 4.09E-02        | 2.46E-04        | --              | --              | 1.55E-08        | 1.28E-06        | 2.44E-14        | 2.25E-06        | 1.29E-03        | 2.03E-05        | 6.43E-06        | 4.14E-04        |
| SR                 | SR-W027-999-LASL-HET | 44.30            | 1.62E+02        | --              | --              | --              | 9.63E-03        | 2.11E+04        | 5.29E+01        | 3.31E+01        | 1.47E+00        | 3.85E-02        | --              | --              | 1.80E-08        | 1.70E-02        | 6.35E-13        | 3.52E-06        | 1.95E+01        | 8.42E-06        | 1.59E-04        | 9.36E-10        |
| SR                 | SR-W027-999-LASL-HOM | 5.82             | 1.63E+01        | --              | --              | --              | 9.70E-04        | 4.73E+03        | 1.16E+01        | 6.30E+00        | 1.48E-01        | 7.57E-03        | --              | --              | 1.82E-09        | 3.81E-03        | 1.21E-13        | 3.55E-07        | 4.37E+00        | 1.85E-06        | 3.03E-05        | 1.84E-10        |
| SR                 | SR-W027-999-MD-HET   | 1675.12          | 3.71E+02        | --              | 1.18E-05        | --              | 2.30E-02        | 1.47E+05        | 3.90E+02        | 2.06E+02        | 5.20E+00        | 2.38E-01        | 2.09E-14        | --              | 5.91E-04        | 1.18E-01        | 3.96E-12        | 3.95E-02        | 1.36E+02        | 2.69E-04        | 9.93E-04        | 4.59E-03        |
| SR                 | SR-W027-999-MD-HOM-A | 2.29             | 2.84E-02        | --              | --              | --              | 2.90E-05        | 1.11E+01        | 2.10E-02        | 1.66E-03        | 4.87E-05        | 2.24E-07        | --              | --              | 1.37E-10        | 8.90E-06        | 2.95E-17        | 1.91E-08        | 1.02E-02        | 3.28E-07        | 7.68E-09        | 2.92E-15        |
| SR                 | SR-W027-999-MD-HOM-B | 22.64            | 2.81E-01        | --              | --              | --              | 2.87E-04        | 1.10E+02        | 2.07E-01        | 1.64E-02        | 4.82E-04        | 2.21E-06        | --              | --              | 1.35E-09        | 8.80E-05        | 2.92E-16        | 1.89E-07        | 1.01E-01        | 3.24E-06        | 7.60E-08        | 2.89E-14        |
| SR                 | SR-W027-999-MD-HOM-C | 1.04             | 1.29E-02        | --              | --              | --              | 1.32E-05        | 5.05E+00        | 9.52E-03        | 7.53E-04        | 2.21E-05        | 1.02E-07        | --              | --              | 6.20E-11        | 4.04E-06        | 1.34E-17        | 8.66E-09        | 4.65E-03        | 1.49E-07        | 3.49E-09        | 1.33E-15        |
| SR                 | SR-W027-999-MD-SOIL  | 90.53            | 3.35E-02        | --              | --              | --              | 1.25E-04        | 5.82E+00        | 5.36E-01        | --              | --              | 4.17E-08        | --              | --              | 6.06E-10        | 4.20E-06        | --              | 8.40E-08        | 5.02E-03        | 8.21E-08        | --              | 5.45E-16        |
| SR                 | SR-W027-FB-PRE86-C-S | 2385.10          | 6.08E+02        | 1.12E-04        | 7.75E-04        | 9.16E-06        | 3.38E-02        | 5.87E+01        | 3.31E+03        | 4.41E+02        | 1.54E+01        | 2.20E-01        | --              | 6.79E-06        | 4.30E-05        | 1.57E-04        | 6.22E-05        | 3.56E-03        | 1.50E-01        | 5.31E-04        | 1.71E-03        | 2.77E-04        |
| SR                 | SR-W027-HBL-Box-A    | 339.60           | 3.66E+00        | --              | --              | --              | 1.02E-01        | 1.31E+03        | 2.83E+00        | 1.52E+00        | 8.59E-02        | 1.82E-03        | --              | --              | 4.22E-07        | 7.48E-04        | 2.30E-14        | 6.32E-05        | 9.83E-01        | 3.99E-07        | 6.50E-06        | 3.93E-11        |
| SR                 | SR-W027-SRSG-HET     | 1889.08          | 8.07E+02        | 3.01E-02        | 9.37E-03        | --              | 1.13E+00        | 1.05E+03        | 1.73E+03        | 3.85E+02        | 1.02E+01        | 4.69E+00        | --              | --              | 6.62E-02        | 1.55E-02        | 2.48E-10        | 4.55E+00        | 1.14E+01        | 8.67E-03        | 3.31E-02        | 4.97E-01        |
| SR                 | SR-W027-SRSG-HOM     | 22.28            | 1.03E+01        | 1.23E-03        | 3.16E-04        | --              | 2.34E-02        | 5.49E+02        | 1.02E+02        | 1.37E+01        | 1.48E-01        | 1.05E-02        | --              | --              | 1.14E-07        | 4.19E-04        | 1.68E-12        | 1.57E-05        | 4.91E-01        | 4.01E-05        | 2.49E-04        | 5.35E-04        |
| <b>Grand Total</b> |                      | <b>168485.00</b> | <b>4.32E+05</b> | <b>9.16E+01</b> | <b>5.91E+01</b> | <b>4.33E+02</b> | <b>5.36E+01</b> | <b>7.77E+05</b> | <b>5.36E+05</b> | <b>1.30E+05</b> | <b>4.22E+03</b> | <b>5.69E+01</b> | <b>3.19E-04</b> | <b>1.15E+02</b> | <b>1.05E+01</b> | <b>7.28E-01</b> | <b>1.45E+00</b> | <b>7.78E+02</b> | <b>7.13E+02</b> | <b>8.71E+00</b> | <b>2.35E+00</b> | <b>5.80E+01</b> |



Table E-6. RH Scaled Volumes (m3) and Activities (Ci) for PA Waste-Stream Level Radionuclides Decayed through 2133

| Site Code          | Waste Stream ID     | Scaled Volume  | Am-241          | Am-243          | Cm-244          | Cs-137          | Np-237          | Pu-238          | Pu-239          | Pu-240          | Pu-241          | Pu-242          | Pu-244          | Sr-90           | Th-229          | Th-230          | Th-232          | U-233           | U-234           | U-235           | U-236           | U-238           |
|--------------------|---------------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| SR                 | SR-BCLRH-T006       | 0.89           | 1.08E+00        | 6.30E-03        | 4.74E-03        | 8.44E-01        | 1.24E-04        | 2.95E-01        | 1.06E-01        | 1.72E-01        | 2.67E-02        | 5.16E-04        | --              | 5.08E-01        | 4.29E-10        | 4.73E-07        | 3.68E-13        | 6.60E-08        | 4.83E-04        | 4.32E-06        | 5.76E-05        | 8.34E-05        |
| SR                 | SR-BCLRH-T007       | 0.89           | 8.93E-03        | 5.20E-05        | 3.92E-05        | 6.98E-03        | 1.03E-06        | 2.43E-03        | 8.68E-04        | 1.42E-03        | 2.21E-04        | 4.24E-06        | --              | 4.19E-03        | 3.53E-12        | 3.91E-09        | 3.03E-15        | 5.45E-10        | 3.99E-06        | 3.57E-08        | 4.75E-07        | 6.89E-07        |
| SR                 | SR-BCLRH-T008       | 0.89           | 1.07E-01        | 6.21E-04        | 4.68E-04        | 8.34E-02        | 1.22E-05        | 2.91E-02        | 1.04E-02        | 1.70E-02        | 2.64E-03        | 5.07E-05        | --              | 5.00E-02        | 4.22E-11        | 4.67E-08        | 3.63E-14        | 6.50E-09        | 4.77E-05        | 4.26E-07        | 5.68E-06        | 8.23E-06        |
| SR                 | SR-BCLRH-T009       | 1.78           | 7.16E-01        | 4.19E-03        | 3.15E-03        | 5.62E-01        | 8.25E-05        | 1.96E-01        | 6.99E-02        | 1.14E-01        | 1.76E-02        | 3.42E-04        | --              | 3.36E-01        | 2.85E-10        | 3.15E-07        | 2.45E-13        | 4.38E-08        | 3.22E-04        | 2.86E-06        | 3.84E-05        | 5.54E-05        |
| SR                 | SR-BCLRH-T010       | 0.89           | 4.06E+00        | 6.88E-02        | 2.53E-02        | 3.55E+01        | 4.66E-03        | 2.17E-02        | 1.57E-03        | 2.53E-02        | 1.10E-03        | 1.10E-05        | --              | 1.75E+01        | 2.08E-08        | 1.04E-08        | 7.02E-15        | 3.02E-06        | 1.28E-05        | 4.87E-08        | 1.14E-06        | 1.29E-06        |
| SR                 | SR-BCLRH-T011       | 3.56           | 3.87E-02        | --              | 1.32E-04        | 2.84E-02        | 1.81E-06        | 1.01E-02        | 1.06E-02        | 5.19E-05        | --              | --              | --              | 1.40E-02        | 2.19E-12        | 2.81E-08        | 4.42E-19        | 5.31E-10        | 2.67E-05        | 1.36E-09        | 1.62E-10        | --              |
| SR                 | SR-T003-773A-HET    | 140.96         | --              | 2.55E-01        | --              | 1.55E+01        | --              | 7.47E+00        | 1.05E-03        | --              | --              | --              | --              | 1.41E+01        | --              | 4.63E-06        | --              | --              | 5.89E-03        | 7.44E-11        | --              | --              |
| SR                 | SR-W027-SRSG-HET-RH | 102.78         | 9.15E+00        | 4.51E+00        | 1.16E+00        | --              | 3.37E-02        | 5.54E+00        | 2.16E+01        | 7.79E+00        | 1.73E-01        | 2.35E-03        | 3.87E-12        | --              | 1.65E-07        | 4.04E-06        | 1.34E-13        | 2.27E-05        | 4.81E-03        | 3.32E-06        | 3.54E-05        | 5.49E-11        |
| <b>Grand Total</b> |                     | <b>7079.00</b> | <b>2.92E+04</b> | <b>6.25E+00</b> | <b>6.74E+01</b> | <b>1.80E+05</b> | <b>6.23E+00</b> | <b>3.43E+03</b> | <b>7.77E+03</b> | <b>1.54E+03</b> | <b>5.06E+02</b> | <b>1.16E+00</b> | <b>4.22E-09</b> | <b>1.30E+05</b> | <b>3.80E+01</b> | <b>1.48E-01</b> | <b>7.48E+00</b> | <b>9.34E+02</b> | <b>8.29E+01</b> | <b>3.76E+00</b> | <b>5.97E-01</b> | <b>1.30E+02</b> |

















Table E-7. CH Scaled Volumes (m3) and Activities (Ci) for PA Waste-Stream Level Radionuclides Decayed through 2383

| Site Code          | Waste Stream ID      | Scaled Volume    | Am-241          | Am-243          | Cm-244          | Cs-137          | Np-237          | Pu-238          | Pu-239          | Pu-240          | Pu-241          | Pu-242          | Pu-244          | Sr-90           | Th-229          | Th-230          | Th-232          | U-233           | U-234           | U-235           | U-236           | U-238           |
|--------------------|----------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| SR                 | SR-W027-221F-HET     | 1490.34          | 2.52E+03        | --              | --              | --              | 4.28E-01        | 2.07E+02        | 7.08E+03        | 1.57E+03        | 9.15E-04        | 9.24E-01        | --              | --              | 4.81E-06        | 3.49E-03        | 1.71E-10        | 3.90E-04        | 1.42E+00        | 2.67E-03        | 1.81E-02        | 1.48E-05        |
| SR                 | SR-W027-221F-HETA-S  | 2080.85          | 4.90E+02        | 4.29E-06        | --              | 7.85E-05        | 9.09E-02        | 1.02E+01        | 1.67E+03        | 5.35E+02        | 2.64E-04        | 9.28E-02        | --              | 1.64E-08        | 6.08E-04        | 1.02E-03        | 9.95E-05        | 1.74E-02        | 3.17E+01        | 7.50E-04        | 6.15E-03        | 2.17E-03        |
| SR                 | SR-W027-221H-HEPA    | 137.97           | 1.16E+01        | --              | --              | --              | 5.34E-02        | 7.68E+02        | 1.59E+01        | 6.78E+00        | 4.87E-06        | 7.02E-03        | --              | --              | 1.50E-06        | 1.25E-02        | 1.97E-11        | 8.63E-05        | 5.15E+00        | 8.77E-05        | 1.09E-03        | 3.25E-06        |
| SR                 | SR-W027-221H-HET-A   | 5568.93          | 3.46E+02        | 5.91E-04        | --              | 7.54E-03        | 1.62E+01        | 2.79E+04        | 1.32E+03        | 4.97E+02        | 1.79E-04        | 3.00E-01        | --              | 5.79E-03        | 8.57E-04        | 4.73E-01        | 2.14E-09        | 3.78E-02        | 1.92E+02        | 4.95E-02        | 1.17E-01        | 1.17E-02        |
| SR                 | SR-W027-221H-HET-S   | 2521.93          | 1.37E+02        | 1.97E-02        | --              | 1.76E-06        | 2.31E-01        | 1.93E+03        | 1.29E+02        | 4.92E+01        | 1.30E-04        | 2.45E-02        | --              | 1.35E-06        | 3.16E-03        | 5.53E-02        | 2.73E-03        | 9.07E-02        | 1.99E+01        | 1.60E-03        | 5.65E-04        | 2.49E-03        |
| SR                 | SR-W027-235F-HET     | 733.92           | 5.84E+02        | --              | --              | --              | 5.23E+00        | 1.19E+04        | 2.54E+02        | 1.20E+02        | 3.86E-04        | 2.93E-01        | --              | --              | 1.50E-04        | 1.96E-01        | 3.01E-10        | 8.57E-03        | 8.02E+01        | 1.42E-03        | 1.68E-02        | 1.39E-03        |
| SR                 | SR-W027-235F-HET-S   | 301.51           | 1.49E+01        | 1.08E-05        | --              | 2.65E-08        | 3.84E-02        | 1.10E+02        | 9.55E+00        | 6.28E+00        | 1.81E-05        | 3.35E-03        | --              | 2.04E-08        | 1.06E-06        | 3.21E-03        | 2.51E-04        | 6.13E-05        | 1.15E+00        | 7.56E-04        | 7.18E-05        | 9.01E-05        |
| SR                 | SR-W027-235F-HOMO    | 5.83             | 8.22E-01        | --              | --              | --              | 1.45E-04        | 6.04E+01        | 9.27E-01        | 4.89E-01        | 1.76E-07        | 6.02E-04        | --              | --              | 1.75E-09        | 1.17E-03        | 5.66E-14        | 1.37E-07        | 4.58E-01        | 3.60E-07        | 5.81E-06        | 3.56E-11        |
| SR                 | SR-W027-773A-HET     | 2495.78          | 5.65E+01        | 3.37E+01        | 1.82E-03        | 1.33E-01        | 9.50E-03        | 9.71E+02        | 3.21E+02        | 9.32E+01        | 3.38E-01        | 1.02E+00        | 1.69E-09        | 1.02E-01        | 1.65E-03        | 1.61E-02        | 8.24E-04        | 4.74E-02        | 6.60E+00        | 1.52E-03        | 9.30E-03        | 2.99E-03        |
| SR                 | SR-W027-773A-HET-S   | 358.24           | 2.69E+01        | 2.41E-01        | 7.14E-06        | 3.64E-06        | 3.87E-02        | 9.38E+01        | 8.94E+01        | 2.12E+01        | 8.10E-04        | 2.37E-03        | --              | 2.80E-06        | 1.03E-06        | 2.66E-03        | 1.31E-04        | 6.03E-05        | 9.62E-01        | 2.03E-04        | 2.43E-04        | 1.50E-03        |
| SR                 | SR-W027-999-AGNS-HET | 56.84            | 2.46E+00        | --              | --              | --              | 5.75E-03        | 1.72E-01        | 6.44E+00        | 1.88E+00        | 3.78E-07        | 2.39E-04        | --              | --              | 1.79E-07        | 5.30E-06        | 1.78E-12        | 9.74E-06        | 1.85E-03        | 1.95E-05        | 1.01E-04        | 2.47E-07        |
| SR                 | SR-W027-999-AGNS-HOM | 5.83             | 8.81E+00        | --              | --              | --              | 4.61E-03        | 1.48E-01        | 6.01E+00        | 1.37E+00        | 2.43E-07        | 2.46E-04        | --              | --              | 1.19E-07        | 4.66E-06        | 1.67E-13        | 6.83E-06        | 1.62E-03        | 2.18E-05        | 1.67E-05        | 4.14E-04        |
| SR                 | SR-W027-999-LASL-HET | 44.30            | 1.08E+02        | --              | --              | --              | 2.04E-02        | 2.93E+03        | 5.25E+01        | 3.22E+01        | 8.72E-06        | 3.85E-02        | --              | --              | 2.72E-07        | 7.03E-02        | 4.10E-12        | 2.03E-05        | 2.60E+01        | 2.14E-05        | 4.02E-04        | 2.39E-09        |
| SR                 | SR-W027-999-LASL-HOM | 5.82             | 1.09E+01        | --              | --              | --              | 2.06E-03        | 6.57E+02        | 1.15E+01        | 6.13E+00        | 8.78E-07        | 7.57E-03        | --              | --              | 2.74E-08        | 1.58E-02        | 7.81E-13        | 2.04E-06        | 5.83E+00        | 4.69E-06        | 7.64E-05        | 4.69E-10        |
| SR                 | SR-W027-999-MD-HET   | 1675.12          | 2.49E+02        | --              | 8.28E-10        | --              | 4.78E-02        | 2.04E+04        | 3.87E+02        | 2.01E+02        | 3.09E-05        | 2.38E-01        | 5.33E-14        | --              | 1.49E-03        | 4.89E-01        | 2.56E-11        | 3.95E-02        | 1.81E+02        | 3.65E-04        | 2.50E-03        | 4.59E-03        |
| SR                 | SR-W027-999-MD-HOM-A | 2.29             | 1.90E-02        | --              | --              | --              | 3.09E-05        | 1.54E+00        | 2.08E-02        | 1.61E-03        | 2.89E-10        | 3.71E-07        | --              | --              | 9.51E-10        | 3.69E-05        | 2.00E-16        | 5.17E-08        | 1.37E-02        | 3.33E-07        | 1.98E-08        | 1.47E-14        |
| SR                 | SR-W027-999-MD-HOM-B | 22.64            | 1.88E-01        | --              | --              | --              | 3.06E-04        | 1.53E+01        | 2.06E-01        | 1.60E-02        | 2.86E-09        | 3.68E-06        | --              | --              | 9.41E-09        | 3.65E-04        | 1.97E-15        | 5.12E-07        | 1.35E-01        | 3.29E-06        | 1.96E-07        | 1.45E-13        |
| SR                 | SR-W027-999-MD-HOM-C | 1.04             | 8.64E-03        | --              | --              | --              | 1.40E-05        | 7.02E-01        | 9.46E-03        | 7.34E-04        | 1.31E-10        | 1.69E-07        | --              | --              | 4.32E-10        | 1.68E-05        | 9.07E-17        | 2.35E-08        | 6.21E-03        | 1.51E-07        | 9.01E-09        | 6.67E-15        |
| SR                 | SR-W027-999-MD-SOIL  | 90.53            | 2.24E-02        | --              | --              | --              | 1.28E-04        | 8.09E-01        | 5.32E-01        | --              | --              | 6.93E-08        | --              | --              | 4.14E-09        | 1.81E-05        | --              | 2.22E-07        | 6.82E-03        | 2.14E-07        | --              | 2.74E-15        |
| SR                 | SR-W027-FB-PRE86-C-S | 2385.10          | 4.07E+02        | 1.09E-04        | 5.41E-08        | 2.84E-08        | 7.63E-02        | 8.15E+00        | 3.29E+03        | 4.29E+02        | 1.67E-04        | 2.20E-01        | --              | 1.77E-08        | 1.25E-04        | 5.20E-04        | 6.22E-05        | 3.62E-03        | 1.68E-01        | 1.35E-03        | 4.94E-03        | 2.77E-04        |
| SR                 | SR-W027-HBL-Box-A    | 339.60           | 2.45E+00        | --              | --              | --              | 1.02E-01        | 1.81E+02        | 2.81E+00        | 1.48E+00        | 5.08E-07        | 1.82E-03        | --              | --              | 3.17E-06        | 3.55E-03        | 1.72E-13        | 1.74E-04        | 1.39E+00        | 1.09E-06        | 1.76E-05        | 1.08E-10        |
| SR                 | SR-W027-SRSG-HET     | 1889.08          | 5.41E+02        | 3.16E-02        | 6.54E-07        | --              | 1.18E+00        | 1.45E+02        | 1.72E+03        | 3.75E+02        | 8.70E-03        | 4.69E+00        | --              | --              | 1.70E-01        | 4.15E-02        | 6.74E-10        | 4.55E+00        | 1.17E+01        | 9.09E-03        | 3.59E-02        | 4.97E-01        |
| SR                 | SR-W027-SRSG-HOM     | 22.28            | 6.91E+00        | 1.20E-03        | 2.21E-08        | --              | 2.41E-02        | 7.62E+01        | 1.02E+02        | 1.33E+01        | 8.80E-07        | 1.05E-02        | --              | --              | 7.74E-07        | 1.77E-03        | 5.38E-12        | 4.15E-05        | 6.60E-01        | 6.52E-05        | 3.50E-04        | 5.35E-04        |
| <b>Grand Total</b> |                      | <b>168485.00</b> | <b>2.89E+05</b> | <b>8.95E+01</b> | <b>4.13E-03</b> | <b>1.34E+00</b> | <b>8.29E+01</b> | <b>1.08E+05</b> | <b>5.32E+05</b> | <b>1.26E+05</b> | <b>1.05E+01</b> | <b>5.69E+01</b> | <b>3.19E-04</b> | <b>3.01E-01</b> | <b>2.83E+01</b> | <b>2.68E+00</b> | <b>1.45E+00</b> | <b>7.78E+02</b> | <b>9.52E+02</b> | <b>8.84E+00</b> | <b>3.30E+00</b> | <b>5.80E+01</b> |



Table E-8. RH Scaled Volumes (m3) and Activities (Ci) for PA Waste-Stream Level Radionuclides Decayed through 2383

| Site Code          | Waste Stream ID     | Scaled Volume  | Am-241          | Am-243          | Cm-244          | Cs-137          | Np-237          | Pu-238          | Pu-239          | Pu-240          | Pu-241          | Pu-242          | Pu-244          | Sr-90           | Th-229          | Th-230          | Th-232          | U-233           | U-234           | U-235           | U-236           | U-238           |
|--------------------|---------------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| SR                 | SR-BCLRH-T006       | 0.89           | 7.24E-01        | 6.16E-03        | 3.31E-07        | 2.61E-03        | 2.00E-04        | 4.12E-02        | 1.05E-01        | 1.68E-01        | 1.06E-04        | 5.16E-04        | --              | 1.32E-03        | 3.94E-09        | 1.69E-06        | 1.09E-12        | 2.48E-07        | 5.74E-04        | 4.35E-06        | 5.89E-05        | 8.34E-05        |
| SR                 | SR-BCLRH-T007       | 0.89           | 5.99E-03        | 5.08E-05        | 2.74E-09        | 2.16E-05        | 1.65E-06        | 3.41E-04        | 8.63E-04        | 1.38E-03        | 8.71E-07        | 4.24E-06        | --              | 1.09E-05        | 3.25E-11        | 1.40E-08        | 8.97E-15        | 2.05E-09        | 4.75E-06        | 3.59E-08        | 4.86E-07        | 6.89E-07        |
| SR                 | SR-BCLRH-T008       | 0.89           | 7.14E-02        | 6.06E-04        | 3.27E-08        | 2.59E-04        | 1.97E-05        | 4.07E-03        | 1.03E-02        | 1.65E-02        | 1.04E-05        | 5.07E-05        | --              | 1.30E-04        | 3.88E-10        | 1.67E-07        | 1.07E-13        | 2.45E-08        | 5.67E-05        | 4.28E-07        | 5.81E-06        | 8.23E-06        |
| SR                 | SR-BCLRH-T009       | 1.78           | 4.80E-01        | 4.09E-03        | 2.20E-07        | 1.74E-03        | 1.32E-04        | 2.74E-02        | 6.94E-02        | 1.11E-01        | 7.04E-05        | 3.42E-04        | --              | 8.76E-04        | 2.62E-09        | 1.13E-06        | 7.24E-13        | 1.65E-07        | 3.82E-04        | 2.87E-06        | 3.92E-05        | 5.54E-05        |
| SR                 | SR-BCLRH-T010       | 0.89           | 2.72E+00        | 6.72E-02        | 1.76E-06        | 1.10E-01        | 4.93E-03        | 1.14E-02        | 2.05E-03        | 2.47E-02        | 7.54E-04        | 1.22E-05        | --              | 4.57E-02        | 1.51E-07        | 5.41E-08        | 2.24E-14        | 8.24E-06        | 2.48E-05        | 4.91E-08        | 1.33E-06        | 1.29E-06        |
| SR                 | SR-BCLRH-T011       | 3.56           | 2.59E-02        | --              | 9.22E-09        | 8.81E-05        | 4.40E-06        | 1.40E-03        | 1.05E-02        | 5.09E-05        | --              | --              | --              | 3.65E-05        | 4.95E-11        | 9.26E-08        | 5.53E-18        | 4.01E-09        | 2.98E-05        | 3.95E-09        | 5.85E-10        | --              |
| SR                 | SR-T003-773A-HET    | 140.96         | --              | 2.49E-01        | --              | 4.81E-02        | --              | 1.04E+00        | 2.85E-03        | --              | --              | --              | --              | 3.66E-02        | --              | 2.12E-05        | --              | --              | 8.20E-03        | 5.56E-10        | --              | --              |
| SR                 | SR-W027-SRSG-HET-RH | 102.78         | 6.15E+00        | 4.41E+00        | 8.14E-05        | --              | 3.43E-02        | 7.88E-01        | 2.14E+01        | 7.59E+00        | 4.41E-02        | 2.38E-03        | 1.01E-11        | --              | 1.12E-06        | 1.74E-05        | 9.43E-13        | 5.97E-05        | 6.53E-03        | 8.63E-06        | 9.34E-05        | 1.44E-10        |
| <b>Grand Total</b> |                     | <b>7079.00</b> | <b>1.95E+04</b> | <b>6.11E+00</b> | <b>4.71E-03</b> | <b>5.59E+02</b> | <b>8.22E+00</b> | <b>4.76E+02</b> | <b>7.72E+03</b> | <b>1.50E+03</b> | <b>5.60E-02</b> | <b>1.16E+00</b> | <b>1.13E-08</b> | <b>3.39E+02</b> | <b>5.87E+01</b> | <b>3.35E-01</b> | <b>7.48E+00</b> | <b>9.33E+02</b> | <b>8.40E+01</b> | <b>3.76E+00</b> | <b>6.08E-01</b> | <b>1.30E+02</b> |

















Table E-9. CH Scaled Volumes (m3) and Activities (Ci) for PA Waste-Stream Level Radionuclides Decayed through 3033

| Site Code          | Waste Stream ID      | Scaled Volume    | Am-241          | Am-243          | Cm-244          | Cs-137          | Np-237          | Pu-238          | Pu-239          | Pu-240          | Pu-241          | Pu-242          | Pu-244          | Sr-90           | Th-229          | Th-230          | Th-232          | U-233           | U-234           | U-235           | U-236           | U-238           |
|--------------------|----------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| SR                 | SR-W027-221F-HET     | 1490.34          | 8.89E+02        | --              | --              | --              | 7.58E-01        | 1.22E+00        | 6.94E+03        | 1.47E+03        | 2.36E-17        | 9.22E-01        | --              | --              | 7.56E-05        | 1.38E-02        | 1.23E-09        | 2.15E-03        | 1.49E+00        | 7.16E-03        | 4.74E-02        | 1.49E-05        |
| SR                 | SR-W027-221F-HETA-S  | 2080.85          | 1.73E+02        | 4.04E-06        | --              | 2.36E-11        | 1.55E-01        | 5.98E-02        | 1.64E+03        | 4.99E+02        | 1.18E-04        | 9.26E-02        | --              | 3.13E-15        | 1.61E-03        | 2.96E-03        | 9.95E-05        | 1.77E-02        | 3.20E-01        | 1.81E-03        | 1.61E-02        | 2.17E-03        |
| SR                 | SR-W027-221H-HEPA    | 137.97           | 4.08E+00        | --              | --              | --              | 5.49E-02        | 4.52E+00        | 1.56E+01        | 6.33E+00        | 1.25E-19        | 7.02E-03        | --              | --              | 1.11E-05        | 4.98E-02        | 5.68E-11        | 2.40E-04        | 5.41E+00        | 9.78E-05        | 1.22E-03        | 3.25E-06        |
| SR                 | SR-W027-221H-HET-A   | 5568.93          | 1.22E+02        | 5.56E-04        | --              | 2.26E-09        | 1.62E+01        | 1.64E+02        | 1.30E+03        | 4.64E+02        | 4.62E-18        | 3.00E-01        | --              | 1.11E-09        | 4.41E-03        | 1.86E+00        | 6.05E-09        | 8.36E-02        | 2.02E+02        | 5.03E-02        | 1.26E-01        | 1.17E-02        |
| SR                 | SR-W027-221H-HET-S   | 2521.93          | 4.84E+01        | 1.86E-02        | --              | 5.28E-13        | 2.49E-01        | 1.14E+01        | 1.27E+02        | 4.60E+01        | 6.00E-05        | 2.45E-02        | --              | 2.58E-13        | 8.35E-03        | 1.90E-01        | 2.73E-03        | 9.11E-02        | 2.06E+01        | 1.68E-03        | 1.48E-03        | 2.49E-03        |
| SR                 | SR-W027-235F-HET     | 733.92           | 2.06E+02        | --              | --              | --              | 5.31E+00        | 6.98E+01        | 2.49E+02        | 1.12E+02        | 9.94E-18        | 2.93E-01        | --              | --              | 1.09E-03        | 7.77E-01        | 8.76E-10        | 2.35E-02        | 8.43E+01        | 1.58E-03        | 1.90E-02        | 1.39E-03        |
| SR                 | SR-W027-235F-HET-S   | 301.51           | 5.26E+00        | 1.01E-05        | --              | 7.96E-15        | 4.03E-02        | 6.45E-01        | 9.37E+00        | 5.86E+00        | 1.23E-05        | 3.35E-03        | --              | 3.89E-15        | 7.94E-06        | 1.10E-02        | 2.51E-04        | 1.73E-04        | 1.19E+00        | 7.62E-04        | 1.89E-04        | 9.01E-05        |
| SR                 | SR-W027-235F-HOMO    | 5.83             | 2.90E-01        | --              | --              | --              | 2.53E-04        | 3.56E-01        | 9.10E-01        | 4.57E-01        | --              | 6.01E-04        | --              | --              | 2.59E-08        | 4.47E-03        | 3.91E-13        | 7.26E-07        | 4.78E-01        | 9.49E-07        | 1.49E-05        | 9.46E-11        |
| SR                 | SR-W027-773A-HET     | 2495.78          | 2.01E+01        | 3.17E+01        | 2.85E-14        | 3.98E-08        | 1.69E-02        | 5.72E+00        | 3.16E+02        | 8.70E+01        | 3.21E-01        | 1.02E+00        | 4.59E-09        | 1.95E-08        | 4.35E-03        | 6.39E-02        | 8.24E-04        | 4.73E-02        | 6.93E+00        | 1.72E-03        | 1.10E-02        | 3.00E-03        |
| SR                 | SR-W027-773A-HET-S   | 358.24           | 9.47E+00        | 2.26E-01        | 1.12E-16        | 1.09E-12        | 4.22E-02        | 5.53E-01        | 8.77E+01        | 1.98E+01        | 7.64E-04        | 2.37E-03        | --              | 5.34E-13        | 7.93E-06        | 9.16E-03        | 1.31E-04        | 1.75E-04        | 9.94E-01        | 2.59E-04        | 6.38E-04        | 1.50E-03        |
| SR                 | SR-W027-999-AGNS-HET | 56.84            | 8.67E-01        | --              | --              | --              | 6.07E-03        | 1.01E-03        | 6.32E+00        | 1.75E+00        | --              | 2.39E-04        | --              | --              | 1.24E-06        | 1.80E-05        | 5.57E-12        | 2.65E-05        | 1.91E-03        | 2.36E-05        | 1.36E-04        | 2.47E-07        |
| SR                 | SR-W027-999-AGNS-HOM | 5.83             | 3.11E+00        | --              | --              | --              | 5.77E-03        | 8.74E-04        | 5.90E+00        | 1.28E+00        | --              | 2.46E-04        | --              | --              | 9.46E-07        | 1.58E-05        | 1.12E-12        | 2.18E-05        | 1.67E-03        | 2.56E-05        | 4.22E-05        | 4.14E-04        |
| SR                 | SR-W027-999-LASL-HET | 44.30            | 3.82E+01        | --              | --              | --              | 3.46E-02        | 1.73E+01        | 5.16E+01        | 3.01E+01        | --              | 3.85E-02        | --              | --              | 3.69E-06        | 2.57E-01        | 2.67E-11        | 1.02E-04        | 2.70E+01        | 5.48E-05        | 1.00E-03        | 6.17E-09        |
| SR                 | SR-W027-999-LASL-HOM | 5.82             | 3.85E+00        | --              | --              | --              | 3.49E-03        | 3.87E+00        | 1.13E+01        | 5.73E+00        | --              | 7.56E-03        | --              | --              | 3.72E-07        | 5.75E-02        | 5.09E-12        | 1.02E-05        | 6.05E+00        | 1.20E-05        | 1.91E-04        | 1.21E-09        |
| SR                 | SR-W027-999-MD-HET   | 1675.12          | 8.78E+01        | --              | 1.30E-20        | --              | 8.04E-02        | 1.20E+02        | 3.80E+02        | 1.87E+02        | --              | 2.37E-01        | 1.38E-13        | --              | 3.74E-03        | 1.79E+00        | 1.67E-10        | 3.95E-02        | 1.88E+02        | 6.11E-04        | 6.24E-03        | 4.59E-03        |
| SR                 | SR-W027-999-MD-HOM-A | 2.29             | 6.70E-03        | --              | --              | --              | 3.34E-05        | 9.12E-03        | 2.04E-02        | 1.51E-03        | --              | 4.37E-07        | --              | --              | 6.65E-09        | 1.34E-04        | 1.32E-15        | 1.43E-07        | 1.42E-02        | 3.46E-07        | 4.99E-08        | 5.57E-14        |
| SR                 | SR-W027-999-MD-HOM-B | 22.64            | 6.63E-02        | --              | --              | --              | 3.30E-04        | 9.03E-02        | 2.02E-01        | 1.49E-02        | --              | 4.32E-06        | --              | --              | 6.58E-08        | 1.33E-03        | 1.31E-14        | 1.42E-06        | 1.40E-01        | 3.42E-06        | 4.94E-07        | 5.51E-13        |
| SR                 | SR-W027-999-MD-HOM-C | 1.04             | 3.04E-03        | --              | --              | --              | 1.52E-05        | 4.15E-03        | 9.28E-03        | 6.85E-04        | --              | 1.99E-07        | --              | --              | 3.02E-09        | 6.10E-05        | 6.02E-16        | 6.50E-08        | 6.44E-03        | 1.57E-07        | 2.27E-08        | 2.53E-14        |
| SR                 | SR-W027-999-MD-SOIL  | 90.53            | 7.90E-03        | --              | --              | --              | 1.31E-04        | 4.77E-03        | 5.22E-01        | --              | --              | 8.16E-08        | --              | --              | 2.79E-08        | 6.71E-05        | --              | 5.87E-07        | 7.10E-03        | 5.52E-07        | --              | 1.04E-14        |
| SR                 | SR-W027-FB-PRE86-C-S | 2385.10          | 1.44E+02        | 1.03E-04        | 8.49E-19        | 8.52E-15        | 1.29E-01        | 4.79E-02        | 3.23E+03        | 4.01E+02        | 7.18E-05        | 2.20E-01        | --              | 3.37E-15        | 3.40E-04        | 1.57E-03        | 6.22E-05        | 3.91E-03        | 1.71E-01        | 3.43E-03        | 1.29E-02        | 2.77E-04        |
| SR                 | SR-W027-HBL-Box-A    | 339.60           | 8.66E-01        | --              | --              | --              | 1.02E-01        | 1.07E+00        | 2.76E+00        | 1.38E+00        | --              | 1.82E-03        | --              | --              | 2.19E-05        | 1.35E-02        | 1.19E-12        | 4.62E-04        | 1.45E+00        | 2.88E-06        | 4.52E-05        | 2.87E-10        |
| SR                 | SR-W027-SRSG-HET     | 1889.08          | 1.91E+02        | 3.52E-02        | 1.03E-17        | --              | 1.25E+00        | 8.55E-01        | 1.69E+03        | 3.50E+02        | 8.38E-03        | 4.68E+00        | --              | --              | 4.29E-01        | 1.11E-01        | 1.94E-09        | 4.54E+00        | 1.18E+01        | 1.02E-02        | 4.29E-02        | 4.97E-01        |
| SR                 | SR-W027-SRSG-HOM     | 22.28            | 2.44E+00        | 1.13E-03        | 3.46E-19        | --              | 2.50E-02        | 4.49E-01        | 9.97E+01        | 1.24E+01        | --              | 1.05E-02        | --              | --              | 5.25E-06        | 6.49E-03        | 2.06E-11        | 1.11E-04        | 6.86E-01        | 1.30E-04        | 5.98E-04        | 5.35E-04        |
| <b>Grand Total</b> |                      | <b>168485.00</b> | <b>1.02E+05</b> | <b>8.42E+01</b> | <b>6.47E-14</b> | <b>4.03E-07</b> | <b>1.21E+02</b> | <b>6.35E+02</b> | <b>5.22E+05</b> | <b>1.18E+05</b> | <b>1.64E+01</b> | <b>5.68E+01</b> | <b>3.20E-04</b> | <b>5.74E-08</b> | <b>7.25E+01</b> | <b>9.35E+00</b> | <b>1.45E+00</b> | <b>7.76E+02</b> | <b>9.89E+02</b> | <b>9.18E+00</b> | <b>5.65E+00</b> | <b>5.80E+01</b> |





Table E-10. RH Scaled Volumes (m3) and Activities (Ci) for PA Waste-Stream Level Radionuclides Decayed through 3033

| Site Code          | Waste Stream ID     | Scaled Volume  | Am-241          | Am-243          | Cm-244          | Cs-137          | Np-237          | Pu-238          | Pu-239          | Pu-240          | Pu-241          | Pu-242          | Pu-244          | Sr-90           | Th-229          | Th-230          | Th-232          | U-233           | U-234           | U-235           | U-236           | U-238           |
|--------------------|---------------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| SR                 | SR-BCLRH-T006       | 0.89           | 2.55E-01        | 5.79E-03        | 5.19E-18        | 7.85E-10        | 2.94E-04        | 2.53E-04        | 1.03E-01        | 1.56E-01        | 1.00E-04        | 5.16E-04        | --              | 2.53E-10        | 3.87E-08        | 5.43E-06        | 3.03E-12        | 9.69E-07        | 5.88E-04        | 4.41E-06        | 6.20E-05        | 8.34E-05        |
| SR                 | SR-BCLRH-T007       | 0.89           | 2.11E-03        | 4.77E-05        | 4.30E-20        | 6.49E-12        | 2.43E-06        | 2.09E-06        | 8.48E-04        | 1.29E-03        | 8.25E-07        | 4.24E-06        | --              | 2.09E-12        | 3.19E-10        | 4.49E-08        | 2.50E-14        | 8.01E-09        | 4.86E-06        | 3.65E-08        | 5.12E-07        | 6.89E-07        |
| SR                 | SR-BCLRH-T008       | 0.89           | 2.52E-02        | 5.70E-04        | 5.13E-19        | 7.77E-11        | 2.90E-05        | 2.50E-05        | 1.01E-02        | 1.54E-02        | 9.88E-06        | 5.06E-05        | --              | 2.49E-11        | 3.81E-09        | 5.36E-07        | 2.99E-13        | 9.56E-08        | 5.81E-05        | 4.35E-07        | 6.11E-06        | 8.23E-06        |
| SR                 | SR-BCLRH-T009       | 1.78           | 1.69E-01        | 3.85E-03        | 3.45E-18        | 5.23E-10        | 1.95E-04        | 1.68E-04        | 6.82E-02        | 1.04E-01        | 6.66E-05        | 3.41E-04        | --              | 1.67E-10        | 2.56E-08        | 3.62E-06        | 2.02E-12        | 6.43E-07        | 3.92E-04        | 2.92E-06        | 4.13E-05        | 5.54E-05        |
| SR                 | SR-BCLRH-T010       | 0.89           | 9.59E-01        | 6.33E-02        | 2.77E-17        | 3.30E-08        | 5.28E-03        | 3.29E-04        | 3.22E-03        | 2.30E-02        | 7.15E-04        | 1.28E-05        | --              | 8.72E-09        | 1.06E-06        | 2.58E-07        | 7.27E-14        | 2.27E-05        | 3.23E-05        | 5.08E-08        | 1.79E-06        | 1.29E-06        |
| SR                 | SR-BCLRH-T011       | 3.56           | 9.15E-03        | --              | 1.45E-19        | 2.65E-11        | 7.79E-06        | 8.25E-06        | 1.03E-02        | 4.75E-05        | --              | --              | --              | 6.98E-12        | 7.76E-10        | 2.79E-07        | 3.97E-17        | 2.21E-08        | 3.03E-05        | 1.06E-08        | 1.53E-09        | --              |
| SR                 | SR-T003-773A-HET    | 140.96         | --              | 2.34E-01        | --              | 1.44E-08        | --              | 6.11E-03        | 7.26E-03        | --              | --              | --              | --              | 7.00E-09        | --              | 7.97E-05        | --              | --              | 8.55E-03        | 3.82E-09        | --              | --              |
| SR                 | SR-W027-SRSG-HET-RH | 102.78         | 2.20E+00        | 4.15E+00        | 1.28E-15        | --              | 3.51E-02        | 5.23E-03        | 2.11E+01        | 7.08E+00        | 4.18E-02        | 2.45E-03        | 2.61E-11        | --              | 7.50E-06        | 6.43E-05        | 6.23E-12        | 1.58E-04        | 6.81E-03        | 2.23E-05        | 2.35E-04        | 3.81E-10        |
| <b>Grand Total</b> |                     | <b>7079.00</b> | <b>6.89E+03</b> | <b>5.75E+00</b> | <b>7.39E-14</b> | <b>1.68E-04</b> | <b>1.08E+01</b> | <b>2.81E+00</b> | <b>7.58E+03</b> | <b>1.40E+03</b> | <b>5.05E-02</b> | <b>1.16E+00</b> | <b>2.98E-08</b> | <b>6.47E-05</b> | <b>1.10E+02</b> | <b>8.28E-01</b> | <b>7.47E+00</b> | <b>9.30E+02</b> | <b>8.42E+01</b> | <b>3.76E+00</b> | <b>6.36E-01</b> | <b>1.30E+02</b> |

















Table E-11. CH Scaled Volumes (m3) and Activities (Ci) for PA Waste-Stream Level Radionuclides Decayed through 7033

DOE/TRU-2008-3379, Revision 1

| Site Code          | Waste Stream ID      | Scaled Volume    | Am-241          | Am-243          | Cm-244 | Cs-137 | Np-237          | Pu-238          | Pu-239          | Pu-240          | Pu-241          | Pu-242          | Pu-244          | Sr-90 | Th-229          | Th-230          | Th-232          | U-233           | U-234           | U-235           | U-236           | U-238           |
|--------------------|----------------------|------------------|-----------------|-----------------|--------|--------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| SR                 | SR-W027-221F-HET     | 1490.34          | 1.46E+00        | --              | --     | --     | 9.17E-01        | 2.31E-14        | 6.19E+03        | 9.62E+02        | --              | 9.16E-01        | --              | --    | 4.05E-03        | 6.59E-02        | 2.56E-08        | 1.99E-02        | 1.48E+00        | 3.30E-02        | 1.89E-01        | 1.55E-05        |
| SR                 | SR-W027-221F-HETA-S  | 2080.85          | 2.83E-01        | 2.77E-06        | --     | --     | 1.87E-01        | 1.13E-15        | 1.46E+03        | 3.27E+02        | 8.51E-05        | 9.19E-02        | --              | --    | 7.26E-03        | 1.41E-02        | 9.95E-05        | 2.10E-02        | 3.17E-01        | 7.93E-03        | 6.43E-02        | 2.17E-03        |
| SR                 | SR-W027-221H-HEPA    | 137.97           | 6.69E-03        | --              | --     | --     | 5.56E-02        | 8.56E-14        | 1.39E+01        | 4.14E+00        | --              | 6.96E-03        | --              | --    | 2.45E-04        | 2.38E-01        | 3.63E-10        | 1.21E-03        | 5.35E+00        | 1.56E-04        | 1.83E-03        | 3.26E-06        |
| SR                 | SR-W027-221H-HET-A   | 5568.93          | 2.00E-01        | 3.82E-04        | --     | --     | 1.62E+01        | 3.11E-12        | 1.16E+03        | 3.04E+02        | --              | 2.98E-01        | --              | --    | 7.58E-02        | 8.89E+00        | 3.58E-08        | 3.63E-01        | 2.00E+02        | 5.52E-02        | 1.71E-01        | 1.17E-02        |
| SR                 | SR-W027-221H-HET-S   | 2521.93          | 7.92E-02        | 1.28E-02        | --     | --     | 2.57E-01        | 2.15E-13        | 1.13E+02        | 3.01E+01        | 4.33E-05        | 2.43E-02        | --              | --    | 3.47E-02        | 9.07E-01        | 2.73E-03        | 9.41E-02        | 2.04E+01        | 2.16E-03        | 5.92E-03        | 2.49E-03        |
| SR                 | SR-W027-235F-HET     | 733.92           | 3.37E-01        | --              | --     | --     | 5.34E+00        | 1.32E-12        | 2.22E+02        | 7.32E+01        | --              | 2.91E-01        | --              | --    | 2.35E-02        | 3.71E+00        | 5.78E-09        | 1.16E-01        | 8.34E+01        | 2.51E-03        | 2.98E-02        | 1.39E-03        |
| SR                 | SR-W027-235F-HET-S   | 301.51           | 8.63E-03        | 6.97E-06        | --     | --     | 4.13E-02        | 1.22E-14        | 8.35E+00        | 3.83E+00        | 8.89E-06        | 3.33E-03        | --              | --    | 1.82E-04        | 5.24E-02        | 2.51E-04        | 8.95E-04        | 1.18E+00        | 7.97E-04        | 7.55E-04        | 9.01E-05        |
| SR                 | SR-W027-235F-HOMO    | 5.83             | 4.75E-04        | --              | --     | --     | 3.05E-04        | 6.73E-15        | 8.11E-01        | 2.99E-01        | --              | 5.97E-04        | --              | --    | 1.35E-06        | 2.11E-02        | 8.00E-12        | 6.62E-06        | 4.73E-01        | 4.34E-06        | 5.91E-05        | 4.56E-10        |
| SR                 | SR-W027-773A-HET     | 2495.78          | 2.64E-01        | 2.18E+01        | --     | --     | 2.06E-02        | 1.78E-10        | 2.84E+02        | 5.69E+01        | 2.31E-01        | 1.02E+00        | 2.23E-08        | --    | 1.77E-02        | 3.05E-01        | 8.24E-04        | 4.68E-02        | 6.86E+00        | 2.91E-03        | 1.94E-02        | 3.00E-03        |
| SR                 | SR-W027-773A-HET-S   | 358.24           | 1.61E-02        | 1.55E-01        | --     | --     | 4.39E-02        | 1.60E-13        | 7.82E+01        | 1.30E+01        | 5.52E-04        | 2.35E-03        | --              | --    | 1.94E-04        | 4.38E-02        | 1.31E-04        | 9.53E-04        | 9.83E-01        | 5.86E-04        | 2.55E-03        | 1.50E-03        |
| SR                 | SR-W027-999-AGNS-HET | 56.84            | 1.42E-03        | --              | --     | --     | 6.22E-03        | 1.91E-17        | 5.63E+00        | 1.15E+00        | --              | 2.37E-04        | --              | --    | 2.77E-05        | 8.44E-05        | 5.03E-11        | 1.36E-04        | 1.89E-03        | 4.71E-05        | 3.05E-04        | 2.47E-07        |
| SR                 | SR-W027-999-AGNS-HOM | 5.83             | 5.08E-03        | --              | --     | --     | 6.37E-03        | 1.65E-17        | 5.26E+00        | 8.36E-01        | --              | 2.44E-04        | --              | --    | 2.83E-05        | 7.40E-05        | 2.25E-11        | 1.39E-04        | 1.66E-03        | 4.76E-05        | 1.66E-04        | 4.14E-04        |
| SR                 | SR-W027-999-LASL-HET | 44.30            | 6.26E-02        | --              | --     | --     | 4.15E-02        | 3.26E-13        | 4.60E+01        | 1.97E+01        | --              | 3.82E-02        | --              | --    | 1.85E-04        | 1.20E+00        | 5.32E-10        | 9.05E-04        | 2.67E+01        | 2.47E-04        | 3.91E-03        | 2.93E-08        |
| SR                 | SR-W027-999-LASL-HOM | 5.82             | 6.30E-03        | --              | --     | --     | 4.18E-03        | 7.32E-14        | 1.01E+01        | 3.75E+00        | --              | 7.50E-03        | --              | --    | 1.86E-05        | 2.68E-01        | 1.01E-10        | 9.12E-05        | 5.98E+00        | 5.41E-05        | 7.44E-04        | 5.76E-09        |
| SR                 | SR-W027-999-MD-HET   | 1675.12          | 1.44E-01        | --              | --     | --     | 9.51E-02        | 2.27E-12        | 3.39E+02        | 1.23E+02        | --              | 2.36E-01        | 6.54E-13        | --    | 1.51E-02        | 8.32E+00        | 3.32E-09        | 4.07E-02        | 1.86E+02        | 2.03E-03        | 2.44E-02        | 4.59E-03        |
| SR                 | SR-W027-999-MD-HOM-A | 2.29             | 1.10E-05        | --              | --     | --     | 3.46E-05        | 1.22E-12        | 1.82E-02        | 9.86E-04        | --              | 4.37E-07        | --              | --    | 1.54E-07        | 6.28E-04        | 2.66E-14        | 7.56E-07        | 1.40E-02        | 4.22E-07        | 1.95E-07        | 3.35E-13        |
| SR                 | SR-W027-999-MD-HOM-B | 22.64            | 1.08E-04        | --              | --     | --     | 3.43E-04        | 1.20E-11        | 1.80E-01        | 9.76E-03        | --              | 4.33E-06        | --              | --    | 1.53E-06        | 6.21E-03        | 2.63E-13        | 7.48E-06        | 1.39E-01        | 4.18E-06        | 1.93E-06        | 3.32E-12        |
| SR                 | SR-W027-999-MD-HOM-C | 1.04             | 4.98E-06        | --              | --     | --     | 1.57E-05        | 5.52E-13        | 8.28E-03        | 4.48E-04        | --              | 1.99E-07        | --              | --    | 7.02E-08        | 2.85E-04        | 1.21E-14        | 3.44E-07        | 6.37E-03        | 1.92E-07        | 8.88E-08        | 1.52E-13        |
| SR                 | SR-W027-999-MD-SOIL  | 90.53            | 1.29E-05        | --              | --     | --     | 1.32E-04        | 2.27E-13        | 4.66E-01        | --              | --              | 8.17E-08        | --              | --    | 5.88E-07        | 3.14E-04        | --              | 2.88E-06        | 7.02E-03        | 2.50E-06        | --              | 6.25E-14        |
| SR                 | SR-W027-FB-PRE86-C-S | 2385.10          | 2.35E-01        | 7.04E-05        | --     | --     | 1.56E-01        | 9.07E-16        | 2.88E+03        | 2.62E+02        | 5.18E-05        | 2.18E-01        | --              | --    | 2.01E-03        | 7.51E-03        | 6.22E-05        | 6.86E-03        | 1.69E-01        | 1.55E-02        | 5.16E-02        | 2.77E-04        |
| SR                 | SR-W027-HBL-Box-A    | 339.60           | 1.42E-03        | --              | --     | --     | 1.02E-01        | 2.02E-14        | 2.45E+00        | 9.04E-01        | --              | 1.81E-03        | --              | --    | 4.53E-04        | 6.40E-02        | 2.42E-11        | 2.23E-03        | 1.43E+00        | 1.31E-05        | 1.79E-04        | 1.38E-09        |
| SR                 | SR-W027-SRSG-HET     | 1889.08          | 3.18E-01        | 5.32E-02        | --     | --     | 1.28E+00        | 1.32E-13        | 1.50E+03        | 2.29E+02        | 6.10E-03        | 4.65E+00        | --              | --    | 1.70E+00        | 5.21E-01        | 1.40E-08        | 4.48E+00        | 1.16E+01        | 1.65E-02        | 7.67E-02        | 4.97E-01        |
| SR                 | SR-W027-SRSG-HOM     | 22.28            | 3.99E-03        | 7.74E-04        | --     | --     | 2.54E-02        | 8.49E-15        | 8.88E+01        | 8.14E+00        | --              | 1.04E-02        | --              | --    | 1.13E-04        | 3.04E-02        | 2.66E-10        | 5.53E-04        | 6.78E-01        | 5.01E-04        | 1.80E-03        | 5.35E-04        |
| <b>Grand Total</b> |                      | <b>168485.00</b> | <b>1.81E+02</b> | <b>5.78E+01</b> | --     | --     | <b>1.41E+02</b> | <b>1.74E-09</b> | <b>4.66E+05</b> | <b>7.70E+04</b> | <b>1.38E+01</b> | <b>5.65E+01</b> | <b>3.25E-04</b> | --    | <b>2.90E+02</b> | <b>4.38E+01</b> | <b>1.45E+00</b> | <b>7.65E+02</b> | <b>9.79E+02</b> | <b>1.11E+01</b> | <b>1.70E+01</b> | <b>5.80E+01</b> |



Table E-12. RH Scaled Volumes (m3) and Activities (Ci) for PA Waste-Stream Level Radionuclides Decayed through 7033

DOE/TRU-2008-3379, Revision 1

| Site Code          | Waste Stream ID     | Scaled Volume  | Am-241          | Am-243          | Cm-244 | Cs-137 | Np-237          | Pu-238          | Pu-239          | Pu-240          | Pu-241          | Pu-242          | Pu-244          | Sr-90 | Th-229          | Th-230          | Th-232          | U-233           | U-234           | U-235           | U-236           | U-238           |
|--------------------|---------------------|----------------|-----------------|-----------------|--------|--------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| SR                 | SR-BCLRH-T006       | 0.89           | 4.91E-04        | 3.98E-03        | --     | --     | 3.42E-04        | 3.65E-13        | 9.23E-02        | 1.02E-01        | 7.25E-05        | 5.12E-04        | --              | --    | 1.51E-06        | 2.59E-05        | 1.69E-11        | 7.44E-06        | 5.83E-04        | 4.80E-06        | 7.71E-05        | 8.34E-05        |
| SR                 | SR-BCLRH-T007       | 0.89           | 4.05E-06        | 3.28E-05        | --     | --     | 2.83E-06        | 3.02E-15        | 7.60E-04        | 8.45E-04        | 5.95E-07        | 4.21E-06        | --              | --    | 1.25E-08        | 2.14E-07        | 1.39E-13        | 6.15E-08        | 4.81E-06        | 3.96E-08        | 6.36E-07        | 6.89E-07        |
| SR                 | SR-BCLRH-T008       | 0.89           | 4.84E-05        | 3.92E-04        | --     | --     | 3.37E-05        | 3.61E-14        | 9.07E-03        | 1.01E-02        | 7.13E-06        | 5.03E-05        | --              | --    | 1.49E-07        | 2.56E-06        | 1.66E-12        | 7.33E-07        | 5.75E-05        | 4.73E-07        | 7.60E-06        | 8.23E-06        |
| SR                 | SR-BCLRH-T009       | 1.78           | 3.25E-04        | 2.64E-03        | --     | --     | 2.27E-04        | 2.43E-13        | 6.11E-02        | 6.79E-02        | 4.81E-05        | 3.39E-04        | --              | --    | 1.00E-06        | 1.73E-05        | 1.12E-11        | 4.93E-06        | 3.88E-04        | 3.17E-06        | 5.13E-05        | 5.54E-05        |
| SR                 | SR-BCLRH-T010       | 0.89           | 2.09E-03        | 4.35E-02        | --     | --     | 5.47E-03        | 9.24E-12        | 8.58E-03        | 1.51E-02        | 5.16E-04        | 1.35E-05        | --              | --    | 2.43E-05        | 1.45E-06        | 6.63E-13        | 1.19E-04        | 3.25E-05        | 7.50E-08        | 4.02E-06        | 1.29E-06        |
| SR                 | SR-BCLRH-T011       | 3.56           | 1.50E-05        | --              | --     | --     | 9.62E-06        | 1.56E-19        | 9.18E-03        | 3.11E-05        | --              | --              | --              | --    | 4.25E-08        | 1.33E-06        | 8.29E-16        | 2.09E-07        | 2.99E-05        | 4.90E-08        | 6.13E-09        | --              |
| SR                 | SR-T003-773A-HET    | 140.96         | --              | 1.61E-01        | --     | --     | --              | 1.16E-16        | 2.76E-02        | --              | --              | --              | --              | --    | --              | 3.77E-04        | --              | --              | 8.46E-03        | 7.61E-08        | --              | --              |
| SR                 | SR-W027-SRSG-HET-RH | 102.78         | 3.38E-02        | 2.85E+00        | --     | --     | 3.55E-02        | 2.11E-11        | 1.92E+01        | 4.64E+00        | 3.02E-02        | 2.77E-03        | 1.25E-10        | --    | 1.58E-04        | 3.01E-04        | 1.25E-10        | 7.73E-04        | 6.73E-03        | 1.02E-04        | 9.19E-04        | 1.97E-09        |
| <b>Grand Total</b> |                     | <b>7079.00</b> | <b>1.13E+01</b> | <b>3.94E+00</b> | --     | --     | <b>1.20E+01</b> | <b>6.11E-11</b> | <b>6.75E+03</b> | <b>9.13E+02</b> | <b>3.65E-02</b> | <b>1.16E+00</b> | <b>1.43E-07</b> | --    | <b>3.64E+02</b> | <b>3.79E+00</b> | <b>7.47E+00</b> | <b>9.14E+02</b> | <b>8.48E+01</b> | <b>3.79E+00</b> | <b>7.70E-01</b> | <b>1.30E+02</b> |





















Table E-14. RH Scaled Volumes (m3) and Activities (Ci) for PA Waste-Stream Level Radionuclide Decayed through 12033

DOE/TRU-2008-3379, Revision 1

| Site Code          | Waste Stream ID     | Scaled Volume  | Am-241          | Am-243          | Cm-244 | Cs-137 | Np-237          | Pu-238          | Pu-239          | Pu-240          | Pu-241          | Pu-242          | Pu-244          | Sr-90 | Th-229          | Th-230          | Th-232          | U-233           | U-234           | U-235           | U-236           | U-238           |
|--------------------|---------------------|----------------|-----------------|-----------------|--------|--------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| SR                 | SR-BCLRH-T006       | 0.89           | 4.84E-05        | 2.49E-03        | --     | --     | 3.42E-04        | 4.57E-23        | 8.03E-02        | 6.03E-02        | 4.82E-05        | 5.07E-04        | --              | --    | 5.19E-06        | 5.02E-05        | 3.75E-11        | 1.47E-05        | 5.75E-04        | 5.22E-06        | 8.89E-05        | 8.34E-05        |
| SR                 | SR-BCLRH-T007       | 0.89           | 3.97E-07        | 2.05E-05        | --     | --     | 2.83E-06        | 3.78E-25        | 6.61E-04        | 4.97E-04        | 3.96E-07        | 4.17E-06        | --              | --    | 4.28E-08        | 4.15E-07        | 3.09E-13        | 1.21E-07        | 4.76E-06        | 4.31E-08        | 7.33E-07        | 6.89E-07        |
| SR                 | SR-BCLRH-T008       | 0.89           | 4.76E-06        | 2.45E-04        | --     | --     | 3.37E-05        | 4.53E-24        | 7.90E-03        | 5.93E-03        | 4.74E-06        | 4.99E-05        | --              | --    | 5.11E-07        | 4.96E-06        | 3.70E-12        | 1.44E-06        | 5.68E-05        | 5.15E-07        | 8.76E-06        | 8.23E-06        |
| SR                 | SR-BCLRH-T009       | 1.78           | 3.21E-05        | 1.65E-03        | --     | --     | 2.27E-04        | 3.05E-23        | 5.32E-02        | 4.00E-02        | 3.20E-05        | 3.36E-04        | --              | --    | 3.44E-06        | 3.35E-05        | 2.49E-11        | 9.72E-06        | 3.83E-04        | 3.45E-06        | 5.91E-05        | 5.54E-05        |
| SR                 | SR-BCLRH-T010       | 0.89           | 3.44E-04        | 2.72E-02        | --     | --     | 5.46E-03        | 1.16E-21        | 1.20E-02        | 8.88E-03        | 3.43E-04        | 1.39E-05        | --              | --    | 8.30E-05        | 2.80E-06        | 1.89E-12        | 2.34E-04        | 3.20E-05        | 1.27E-07        | 5.76E-06        | 1.29E-06        |
| SR                 | SR-BCLRH-T011       | 3.56           | 4.93E-09        | --              | --     | --     | 9.61E-06        | --              | 7.95E-03        | 1.83E-05        | --              | --              | --              | --    | 1.46E-07        | 2.58E-06        | 2.82E-15        | 4.12E-07        | 2.95E-05        | 9.11E-08        | 9.70E-09        | --              |
| SR                 | SR-T003-773A-HET    | 140.96         | --              | 1.00E-01        | --     | --     | --              | --              | 4.10E-02        | --              | --              | --              | --              | --    | --              | 7.30E-04        | --              | --              | 8.34E-03        | 2.49E-07        | --              | --              |
| SR                 | SR-W027-SRSG-HET-RH | 102.78         | 2.01E-02        | 1.78E+00        | --     | --     | 3.55E-02        | 2.64E-21        | 1.69E+01        | 2.73E+00        | 2.01E-02        | 2.96E-03        | 2.47E-10        | --    | 5.39E-04        | 5.82E-04        | 4.24E-10        | 1.52E-03        | 6.64E-03        | 1.91E-04        | 1.45E-03        | 4.13E-09        |
| <b>Grand Total</b> |                     | <b>7079.00</b> | <b>2.81E-02</b> | <b>2.47E+00</b> | --     | --     | <b>1.20E+01</b> | <b>7.65E-21</b> | <b>5.85E+03</b> | <b>5.37E+02</b> | <b>2.43E-02</b> | <b>1.15E+00</b> | <b>2.83E-07</b> | --    | <b>5.65E+02</b> | <b>7.36E+00</b> | <b>7.47E+00</b> | <b>8.95E+02</b> | <b>8.54E+01</b> | <b>3.82E+00</b> | <b>8.75E-01</b> | <b>1.30E+02</b> |

**ANNUAL TRANSURANIC WASTE INVENTORY REPORT – 2007**

**APPENDIX F**

**Historic Crosswalk of Inventory Waste Streams**

## F-1 INTRODUCTION

This Appendix contains a crosswalk that maps current 2006 waste streams to those identified in the Transuranic Waste Baseline Inventory Report, 2004 (TWBIR-2004) [DOE 2006c], and to the TWBIR, Revision 2 [DOE 1995b].

Rocky Flats Environmental Technology Site (RFETS) has shipped all of its transuranic (TRU) waste to the Waste Isolation Pilot Plant (WIPP) and is considered a closed site; therefore, all of its waste streams are contained in the WIPP Waste Information System (WWIS) and can be found in Appendix B of this document. The crosswalk of RFETS waste streams will no longer be presented in this section.

Battelle Columbus Laboratories (BCL) has shipped all of its TRU waste either to Hanford Richland Operations Office (RL) or the Savannah River Site (SRS); therefore, BCL is considered a closed site. Hanford RL and SRS inventories reflect the waste that they received from BCL. The crosswalk of BCL waste streams will no longer be presented in this section.

In the tables of this appendix, “N/A” in the *TWBIR, Revision 2, Waste Streams* column identifies new waste streams that were reported the TWBIR-2004. “N/A” in the *TWBIR-2004 Waste Streams* column identifies a deleted waste stream from the TWBIR, Revision 2. In the case of the *2006 Waste Streams* column, some wastes were reported in the TWBIR-2004 that were not reported in 2006, but were reassigned to another waste stream or waste streams.

### F-2 Argonne National Laboratory (ANL)

Table F-1 contains the crosswalk of waste streams beginning with the TWBIR, Revision 2, crosswalked to the TWBIR-2004 waste streams, and then crosswalked to the 2006 waste streams for Argonne National Laboratory (ANL).

**Table F-1. Argonne National Laboratory-East Waste Streams Crosswalk**

| TWBIR, Revision 2 Waste Streams    | TWBIR-2004 Waste Streams | 2006 Waste Streams |
|------------------------------------|--------------------------|--------------------|
| AE-W041, AE-W042, AE-T001          | AE-T001                  | AE-T001            |
| AE-W038, AE-W039, AE-W040, AE-T003 | AE-T003                  | AE-T003            |
| AE-T009                            | AE-T009                  | AE-T009            |

#### F-2.1 Materials Fuels Complex (MFC) – formerly Argonne National Laboratory-West (AW)

Argonne National Laboratory-West (ANL-W) is now the Materials Fuels Complex (MFC), a part of Idaho National Laboratory (INL).



Table F-2 contains the crosswalk of waste streams beginning with the TWBIR, Revision 2, crosswalked to the TWBIR-2004 waste streams, and then crosswalked to the 2006 waste streams.

**Table F-2. Materials Fuels Complex Waste Streams Crosswalk**

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Stream</b> |
|--|---------------------------------|--------------------------|
| AW-N026.82                             | AW-N026.82                      | AW-N026.82, AW-W029      |
| AW-N027.531                            | AW-N027.531                     | AW-N027.531              |
| AW-T029.1323                           | AW-W029                         | AW-W029                  |
| AW-T030.1321                           | N/A                             | N/A                      |
| AW-T031.1322                           | AW-T031.1322                    | AW-T031.1322             |
| AW-T032-1324                           | N/A                             | N/A                      |
| AW-T033.1325                           | AW-T033.1325                    | AW-T033.1325             |
| AW-T034.1327                           | N/A                             | N/A                      |
| AW-T035.1326                           | N/A                             | N/A                      |
| AW-W012.10                             | AW-W012.10                      | N/A                      |
| AW-W016.20                             | N/A                             | N/A                      |
| AW-W018                                | AW-W018                         | AW-W018                  |
| AW-W019                                | AW-W019                         | AW-W019                  |
| AW-W020.13                             | AW-W20.13                       | AW-W20.13                |
| AW-W021.16                             | N/A                             | N/A                      |
| AW-W022.22                             | N/A                             | N/A                      |
| AW-N028                                | AW-W028                         | AW-W028                  |
| N/A                                    | AW-W026                         | AW-W026                  |
| N/A                                    | AW-W046                         | AW-W046                  |
| N/A                                    | AW-W047                         | AW-W047                  |
| N/A                                    | AW-W048                         | AW-W048                  |
| N/A                                    | AW-W049                         | AW-W049                  |
| N/A                                    | IN-TRA-BE-01                    | AW-IN-TRA-BE-01          |

**F-2.2 Babcock and Wilcox-Lynchburg (BL)**

The Babcock and Wilcox-Lynchburg (BL) TRU waste was included in the 2006 TRU waste inventory information. Table F-3 provides the waste stream identified by BL for the TWBIR-2004. A notice was received stating that no defense determination for this waste was going to be pursued; therefore, this waste stream was not included in the update for this annual report.

**Table F-3. Babcock and Wilcox-Lynchburg Waste Streams Crosswalk**

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b>   |
|--|---------------------------------|-----------------------------|
| N/A                                    | BL-001                          | Not reported in this update |

### F-2.3 Bettis Atomic Power Laboratory (BAPL)

Table F-4 contains the crosswalk of waste streams beginning with the TWBIR, Revision 2, crosswalked to the TWBIR-2004 waste streams, and then crosswalked to the 2006 waste streams for Bettis Atomic Power Laboratory (BAPL).

**Table F-4. Bettis Atomic Power Laboratory Waste Streams Crosswalk**

| TWBIR, Revision 2 Waste Streams | TWBIR-2004 Waste Streams | 2006 Waste Streams |
|---------------------------------|--------------------------|--------------------|
| BT-T001                         | BT-T001                  | BT-T001, BT-T007   |
| BT-T002                         | BT-T002                  | BT-T002            |
| BT-T003                         | N/A                      | N/A                |
| BT-T004                         | N/A                      | N/A                |
| BT-T005                         | N/A                      | N/A                |

### F-2.4 Areva – Formerly Framatome (FR)

Framatome (FR) is now Areva. Table F-5 contains the crosswalk of waste streams beginning with the TWBIR, Revision 2, crosswalked to the TWBIR-2004 waste streams, and then crosswalked to the 2006 waste streams for Areva.

**Table F-5. Framatome Waste Streams Crosswalk**

| TWBIR, Revision 2 Waste Streams | TWBIR-2004 Waste Streams | 2006 Waste Streams |
|---------------------------------|--------------------------|--------------------|
| N/A                             | FM-MOX-MT02              | FM-MOX-MT02        |
| N/A                             | FM-MOX-T01               | FM-MOX-T01         |

### F-2.5 General Electric-Vallecitos Nuclear Center (GE)

Table F-6 contains the crosswalk of waste streams beginning with the TWBIR, Revision 2, crosswalked to the TWBIR-2004 waste streams, and then crosswalked to the 2006 waste streams for the General Electric Vallecitos Nuclear Center (GE).

**Table F-6. General Electric-Vallecitos Nuclear Center Waste Streams Crosswalk**

| TWBIR, Revision 2 Waste Streams | TWBIR-2004 Waste Streams | 2006 Waste Streams |
|---------------------------------|--------------------------|--------------------|
| N/A                             | VN-CHT001                | VN-CHT001          |
| N/A                             | VN-RHT001                | VN-RHT001          |

## F-2.6 Hanford Richland Operations Office (RL)

The TRU waste streams identified for the Richland Operations Office (RL) are designated with an “RL” site identifier.

Table F-7 contains the crosswalk of RL waste streams from the TWBIR, Revision 2, to the TWBIR – 2004, and then to the 2006 combined waste streams. “N/A” in the *TWBIR, Revision 2, Waste Streams* column identifies new waste streams that were identified in the TWBIR-2004. “N/A” in the *2006 Waste Streams* column identifies a deleted waste stream where waste has either been assigned to a new waste stream or combined with an existing waste stream.

**Table F-7. Hanford RL Waste Streams Crosswalk**

| TWBIR, Revision 2 Waste Streams | TWBIR-2004 Waste Streams | 2006 Waste Streams |
|---------------------------------|--------------------------|--------------------|
| RL-T101                         | RL-T101, RL-W472         | RLPURX-05          |
| RL-T102                         | RL-T102                  | RLPURX-05          |
| RL-T103                         | RL-T103                  | RL216Z-02          |
| RL-T104                         | RL-T104                  | RL221T-01          |
| RL-T105                         | RL-T105                  | RL222S-01          |
| RL-T106                         | RL-T106                  | RL233S-01          |
| RL-T107                         | RL-T107                  | RLPFP-01           |
| RL-T108                         | RL-T108                  | RL200-01           |
| RL-T109                         | RL-T109                  | RL308-01           |
| RL-T110                         | RL-T110                  | RL300-01           |
| RL-T112                         | RL-T112                  | RL300-01           |
| RL-T113                         | RL-T113                  | RL200-01           |
| RL-W114                         | RL-T114                  | RL209E-01          |
| RL-T115                         | RL-T115                  | RL231Z-01          |
| RL-T116                         | RL-T116                  | RL300-01           |
| RL-T118                         | RL-T118                  | RL300-01           |
| RL-T120                         | RL-T120                  | RL200-01           |
| RL-T121                         | RL-T121                  | RL105-07           |
| RL-T122                         | RL-T122                  | RL105-01           |
| RL-T123                         | RL-T123                  | RLARG-01           |
| RL-T124                         | RL-T124                  | RLARG-07           |
| RL-T125                         | RL-T125                  | RLARG-01           |
| RL-T127                         | RL-T127                  | RLBW-01            |
| RL-T128                         | RL-T128                  | RLBART-01          |
| RL-T129                         | RL-T129                  | RLBAT-01           |
| RL-T130                         | RL-T130                  | RLBET-01           |
| RL-T131                         | RL-T131                  | RLESG-01           |
| RL-T132                         | RL-T132                  | RLEXX-01           |
| RL-T133                         | RL-T133                  | RLIAEA-01          |

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b>   | <b>2006 Waste Streams</b> |
|--|---|---------------------------|
| RL-T134                                | RL-T134   | RLMLB-01                  |
| RL-T135                                | RL-T135   | RLMLL-01                  |
| RL-T137                                | RL-T137   | RLCFF-01                  |
| RL-T140                                | RL-T140   | RLRFET-01                 |
| RL-T143                                | RL-T143   | RLGEV-01                  |
| RL-T145                                | RL-T145   | RLWAR-01                  |
| RL-T147                                | RL-T147   | RL325-08                  |
| RL-T148                                | RL-T148, RL-W684  | RL324-08                  |
| RL-T149                                | RL-T149   | RL-325-08                 |
| RL-W161                                | RL-W161   | RLPURX-07                 |
| RL-W162                                | RL-W162   | RLPURX-08                 |
| RL-W276                                | RL-W700   | RLARG-01                  |
| RL-W277                                | RL-W701   | RLBAT-08                  |
| RL-W278                                | RL-W704   | RLEST-01                  |
| RL-W279                                | RL-W715, RL-W716, RL-W718,<br>RL-W719, RL-W720, RL-W721,<br>RL-W722, RL-W725, RL-W726,<br>RL-W727, RL-W728, RL-W729   | RLCFF-01, RLCFF-03        |
| RL-W280                                | RL-W715, RL-W723  | RLCFF-03                  |
| RL-W281                                | N/A   | N/A                       |
| RL-W282                                | RL-W535, RL-W618  | RLPFP-05                  |
| RL-W283                                | RL-W447, RL-W448  | RL201-01                  |
| RL-W284                                | RL-W284   | Not reported in 2006      |
| RL-W285                                | RL-W450, RL-W451, RL-W455,<br>RL-W456, RL-W457, RL-W458,<br>RL-W459, RL-W461, RL-W462,<br>RL-W463, RL-W465, RL-W466,<br>RL-W467, RL-W468, RL-W469,<br>RL-W470 | RLPURX-01, RL202S-01      |
| RL-W286                                | RL-W715   | RLCFF-03                  |
| RL-W287                                | RL-W455, RL-W456, RL-W457,<br>RL-W458, RL-W459, RL-W461,<br>RL-W462, RL-W463, RL-W465,<br>RL-W466, RL-W467, RL-W468,<br>RL-W469, RL-W470                      | RLPURX-01                 |
| RL-W288                                | RL-W455, RL-W456, RL-W457,<br>RL-W458, RL-W459, RL-W461,<br>RL-W462, RL-W463, RL-W465,<br>RL-W466, RL-W467, RL-W468,<br>RL-W469, RL-W470                      | RLPURX-01                 |
| RL-W289                                | RL-W455, RL-W456, RL-W457,<br>RL-W458, RL-W459, RL-W461,<br>RL-W462, RL-W463, RL-W465,<br>RL-W466, RL-W467, RL-W468,<br>RL-W469, RL-W470, RL-W485             | RLPURX-01                 |
| RL-W290                                | RL-W455, RL-W456, RL-W457,  | RLPURX-01                 |

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b>   | <b>2006 Waste Streams</b> |
|--|---|---------------------------|
|  | RL-W458, RL-W459, RL-W461,<br>RL-W462, RL-W463, RL-W465,<br>RL-W466, RL-W467, RL-W468,<br>RL-W469, RL-W470  |                           |
| RL-W291                                | RL-W452   | RLPURX-01                 |
| RL-W292                                | RL-W449, RL-W450, RL-W451,<br>RL-W453, RL-W466, RL-W473   | RLPURX-01                 |
| RL-W293                                | RL-W455, RL-W456, RL-W457,<br>RL-W458, RL-W459, RL-W461,<br>RL-W462, RL-W463, RL-W465,<br>RL-W466, RL-W467, RL-W468,<br>RL-W469, RL-W470                      | RLPURX-01                 |
| RL-W294                                | RL-W455, RL-W456, RL-W457,<br>RL-W458, RL-W459, RL-W461,<br>RL-W462, RL-W463, RL-W465,<br>RL-W466, RL-W467, RL-W468,<br>RL-W469, RL-W470                      | RLPURX-01                 |
| RL-W295                                | RL-W455, RL-W456, RL-W457,<br>RL-W458, RL-W459, RL-W461,<br>RL-W462, RL-W463, RL-W465,<br>RL-W466, RL-W467, RL-W468,<br>RL-W469, RL-W470                      | RLPURX-01                 |
| RL-W296                                | RL-W455, RL-W456, RL-W457,<br>RL-W458, RL-W459, RL-W461,<br>RL-W462, RL-W463, RL-W465,<br>RL-W466, RL-W467, RL-W468,<br>RL-W469, RL-W470                      | RLPURX-01                 |
| RL-W297                                | RL-W453, RL-W455, RL-W456,<br>RL-W457, RL-W458, RL-W459,<br>RL-W461, RL-W462, RL-W463,<br>RL-W465, RL-W466, RL-W467,<br>RL-W468, RL-W469, RL-W470             | RLPURX-01                 |
| RL-W298                                | RL-W454, RL-W455, RL-W456,<br>RL-W457, RL-W458, RL-W459,<br>RL-W461, RL-W462, RL-W463,<br>RL-W464, RL-W465, RL-W466,<br>RL-W467, RL-W468, RL-W469,<br>RL-W470 | RLPURX-05                 |
| RL-W299                                | RL-W481   | RLPURX-01                 |
| RL-W300                                | RL-W480   | RLPURX-01                 |
| RL-W301                                | RL-W746   | RL222S-01, RLCH2-01       |
| RL-W302                                | RL-W487, RL-W488  | RL222S-01                 |
| RL-W303                                | RL-W744   | RLSWO-01                  |
| RL-W304                                | RL-W489, RL-W490, RL-W491,<br>RL-W492, RL-W493, RL-W536   | RLPFP-01, RL231Z-01       |
| RL-W305                                | RL-W530, RL-W538  | RLPFP-01                  |
| RL-W306                                | RL-W565, RL-W566  | RLPFP-01                  |
| RL-W307                                | RL-W568   | RLPFP-05                  |

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b>                       | <b>2006 Waste Streams</b>    |
|--|---|------------------------------|
| RL-W308                                | RL-W536, RL-W538                                      | RLPFP-01                     |
| RL-W309                                | RL-W533   | RLPFP-01                     |
| RL-W310                                | RL-W505, RL-W521, RL-W557                             | RLPFP-01, RLPFP-03           |
| RL-W311                                | RL-W531, RL-W565, RL-W566                             | RLPFP-01                     |
| RL-W312                                | RL-W565, RL-W566                                      | RLPFP-01                     |
| RL-W313                                | RL-W514, RL-W568                                      | RLPFP-01, RLPFP-05           |
| RL-W314                                | RL-W517, RL-W525, RL-W531, RL-W551                    | RLPFP-01                     |
| RL-W315                                | RL-W559   | Not reported in 2006         |
| RL-W316                                | RL-W539   | RLPFP-01                     |
| RL-W317                                | RL-W542, RL-W552, RL-W562                             | RLPFP-01                     |
| RL-W318                                | RL-W541, RL-W542, RL-W561, RL-W562, RL-W565, RL-W566  | RLPFP-01                     |
| RL-W319                                | RL-W515, RL-W532, RL-W545, RL-W554, - RL-W687         | RLPFP-01, RL327-07           |
| RL-W320                                | RL-W568   | RLPFP-05                     |
| RL-W321                                | RL-W520, RL-W523, RL-W537, RL-W550                    | RLPFP-01                     |
| RL-W322                                | RL-W504, RL-W541                                      | RLPFP-01, RLPFP-03           |
| RL-W323                                | RL-W542, RL-W552                                      | RLPFP-01                     |
| RL-W324                                | RL-W543, RL-W568                                      | RLPFP-01, RLPFP-05           |
| RL-W325                                | RL-W526, RL-W529, RL-W543, RL-W544, RL-W553           | RLPFP-01                     |
| RL-W326                                | RL-W498, RL-W499, RL-W502,                            | RLPFP-03, RLPFP-04           |
| RL-W327                                | RL-W327, RL-W499, RL-W507, RL-W516, RL-W534           | RLPFP-01, RLPFP-03, RLPFP-04 |
| RL-W328                                | RL-W328   | Not reported in 2006         |
| RL-W329                                | RL-W329, RL-W498, RL-W521, RL-W546                    | RLPFP-01, RLPFP-04           |
| RL-W330                                | RL-W526, RL-W547                                      | RLPFP-01                     |
| RL-W331                                | RL-W525, RL-W531, RL-W533, RL-W547, RL-W551, RL-W555  | RLPFP-01                     |
| RL-W332                                | RL-W332   | Not reported in 2006         |
| RL-W333                                | RL-W333 RL-W548,                                      | RLPFP-01                     |
| RL-W334                                | RL-W334   | Not reported in 2006         |
| RL-W335                                | RL-W580   | RL2718-01                    |
| RL-W336                                | RL-W600   | RL300-01                     |
| RL-W337                                | RL-W600, RL-W602, RL-W610, RL-W622, RL-W623           | RL324-012, RL324-08          |
| RL-W338                                | RL-W627, RL-W632, RL-W638, RL-W639, RL-W649           | RL325-01, RL325-07           |
| RL-W339                                | RL-W653, RL-W654                                      | RL325-01                     |
| RL-W340                                | RL-W629, RL-W636, RL-W637, RL-W640, RL-W642, RL-W643, | RL325-01, RL325-03           |

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b>   | <b>2006 Waste Streams</b> |
|--|---|---------------------------|
|  | RL-W644, RL-W645, RL-W646,<br>RL-W647, RL-W648  |                           |
| RL-W341                                | RL-W668, RL-W669, RL-W670,<br>RL-W671   | RL325-01, RL325-05        |
| RL-W342                                | RL-W668, RL-W669, RL-W670,<br>RL-W672, RL-W673  | RL325-01, RL325-05        |
| RL-W343                                | RL-W668, RL-W669, RL-W670,<br>RL-W672, RL-W673  | RL325-01                  |
| RL-W344                                | RL-W689   | RL300-01                  |
| RL-W345                                | RL-W502, RL-W519  | RLPFP-01, RLPFP-03        |
| RL-W346                                | RL-W587   | RL308-01                  |
| RL-W347                                | RL-W588   | RL308-01                  |
| RL-W348                                | RL-W582, RL-W590  | RL308-01                  |
| RL-W349                                | RL-W589   | RL308-01                  |
| RL-W350                                | RL-W584, RL-W586  | RL308-01                  |
| RL-W351                                | RL-W702   | RLPRF-06                  |
| RL-W352                                | RL-W703   | RLPRF-01                  |
| RL-W353                                | RL-W705   | RLEST-03                  |
| RL-W354                                | RL-W706   | RLCH2-02                  |
| RL-W355                                | RL-W707   | RLESG-01                  |
| RL-W356                                | RL-W708, RL-W709, RL-W710,<br>RL-W 712, RL-W713   | RLESG-01                  |
| RL-W357                                | RL-W357, RL-W714  | RLKAPL-03                 |
| RL-W358                                | RL-W716, RL-W718, RL-W719,<br>RL-W720, RL-W721, RL-W723,<br>RL-W 725, RL-W726, RL-W727,<br>RL-W728, RL-W729 | RLCFF-01                  |
| RL-W359                                | RL-W717, RL-W724  | RLCFF-01                  |
| RL-W360                                | RL-W716, RL-W718, RL-W719,<br>RL-W720, RL-W721, RL-W 725,<br>RL-W726, RL-W727, RL-W728,<br>RL-W729          | RLCFF-01                  |
| RL-W361                                | RL-W715, RL-W723  | RLCFF-03                  |
| RL-W362                                | RL-W462, RL-W463, RL-W466,<br>RL-W467, RL-W474, RL-W477,<br>RL-W478, RL-W479                                | RLPURX-01                 |
| RL-W363                                | RL-W471, RL-W472  | RLPURX-01                 |
| RL-W364                                | RL-W449, RL-W450, RL-W451,<br>RL-W456, RL-W453, RL-W466,<br>RL-W468, RL-W473, RL-W475,<br>RL-W476, RL-W478  | RLPURX-01, RLPURX-05      |
| RL-W365                                | RL-W454, RL-W460, RL-W464,<br>RL-W476   | RLPURX-05, RLPURX-01      |
| RL-W366                                | RL-W366, RL-W466, RL-W472   | RLPURX-01                 |
| RL-W367                                | RL-W482   | RLPURX-05                 |



| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b>  | <b>2006 Waste Streams</b>    |
|--|--|------------------------------|
| RL-W368                                | RL-W483  | RLPURX-05                    |
| RL-W369                                | RL-W748  | RLCH2-05                     |
| RL-W370                                | RL-W748  | RLCH2-05                     |
| RL-W371                                | RL-W746, RL-T114   | RL209E-01                    |
| RL-W372                                | RL-W746  | RLCH2-01                     |
| RL-W373                                | RL-W494, RL-W495, RL-W496  | RL231Z-01, RL231Z-03         |
| RL-W374                                | RL-W513  | RLPFP-05                     |
| RL-W375                                | RL-W513  | RLPFP-05                     |
| RL-W376                                | RL-W569, RL-W570   | RLPFP-05                     |
| RL-W377                                | RL-W522, RL-W524, RL-W528, RL-W518, RL-W573, RL-W571, RL-W572, RL-W576, RL-W575, RL-W535, RL-W574, RL-W549, RL-W577, RL-W578 | RLPFP-05                     |
| RL-W378                                | RL-W527  | RLPFP-05                     |
| RL-W379                                | RL-W528  | RLPFP-05                     |
| RL-W380                                | RL-W498, RL-W499   | RLPFP-04                     |
| RL-W381                                | RL-W536  | RLPFP-01                     |
| RL-W382                                | RL-W382, RL-W540, RL-W560, RL-W566, RL-W573, RL-W575, RL-W576, RL-W577, RL-W578  | RLPFP-01, RLPFP-05           |
| RL-W383                                | RL-W500, RL-W567   | RLPFP-03                     |
| RL-W384                                | RL-W581  | RL2718-01                    |
| RL-W385                                | RL-W592  | RL308-01                     |
| RL-W386                                | RL-W586  | RL308-01                     |
| RL-W387                                | RL-W593 RL-W597  | RL308-01                     |
| RL-W388                                | RL-W594, RL-W595, RL-W596, RL-W597, RL-W598, RL-W599   | RL308-01                     |
| RL-W389                                | RL-W583 RL-W585  | RL308-01                     |
| RL-W390                                | RL-W592  | RL308-01                     |
| RL-W391                                | RL-W391  | RL308-01                     |
| RL-W392                                | RL-W601, RL-W612, RL-W615, RL-W616   | RL324-01, RL324-03, RL324-07 |
| RL-W393                                | RL-W655, RL-W657, RL-W663  | RL315-05, RL325-07           |
| RL-W394                                | RL-W625, RL-W626, RL-W627, RL-W628, RL-W629, RL-W655, RL-W656, RL-W659   | RL325-03, RL325-05           |
| RL-W395                                | RL-W657, RL-W658, RL-W630, RL-W631   | RL325-01, RL325-08           |
| RL-W396                                | RL-W657  | RL325-05                     |
| RL-W397                                | RL-W633, RL-W634, RL-W635, RL-W641, RL-W660, RL-W661, RL-W662, RL-W665, RL-W666  | RL325-05                     |
| RL-W398                                | RL-W633, RL-W634, RL-W635,   | RL325-05                     |

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b>   | <b>2006 Waste Streams</b> |
|--|---|---------------------------|
|  | RL-W641, RL-W660, RL-W661,<br>RL-W662, RL-W665, RL-W666   |                           |
| RL-W399                                | RL-W685   | RL327-05                  |
| RL-W400                                | RL-W685   | RL-327-05                 |
| RL-W401                                | RL-W686, RL-W688  | RL327-07                  |
| RL-W402                                | RL-W690   | RL300-01                  |
| RL-W403                                | RL-W691, RL-W692, RL-W693,<br>RL-W694   | RL300-01                  |
| RL-W404                                | RL-W691, RL-W692, RL-W694   | RL300-01                  |
| RL-W405                                | RL-W695, RL-W696, RL-W697   | RL300-01                  |
| RL-W406                                | RL-W699   | RL325-06                  |
| RL-W407                                | RL-W407   | RLSWO-08                  |
| RL-W408                                | RL-W408   | RLSWO-01                  |
| RL-W409                                | RL-W508, RL-W509, RL-W506,<br>RL-W510, RL-W503, RL-W501,<br>RL-W564, RL-W563, RL-W547,<br>RL-W512, RL-W511, RL-W540,<br>RL-W555, RL-W526, RL-W556,<br>RL-W558, RL-W731, RL-W732,<br>RL-W733, RL-W734, RL-W735,<br>RL-W736, RL-W737, RL-W738,<br>RL-W739, RL-W740, RL-W741,<br>RL-W742, RL-W743, RL-W744,<br>RL-W756 | RLPFP-03, RLSWO-01        |
| RL-W410                                | RL-W586, RL-W596, RL-W597,<br>RL-W598, RL-W599  | RL308-01                  |
| RL-W411                                | RL-W491, RL-W492, RL-W493   | RL231Z-01                 |
| RL-W412                                | RL-W685   | RL327-05                  |
| RL-W413                                | N/A   | N/A                       |
| RL-W414                                | N/A   | N/A                       |
| RL-W415                                | RL-W415   | RLSWO-01                  |
| RL-W416                                | RL-W513   | RLPFP-05                  |
| RL-W417                                | N/A   | N/A                       |
| RL-W418                                | RL-W418   | RLSWO-01                  |
| RL-W419                                | RL-W419   | RL105-07                  |
| RL-W420                                | RL-W420   | RLCH2-08                  |
| RL-W421                                | RL-W421   | RLCH2-08                  |
| RL-W422                                | RL-W745, RL-W746, RL-W747   | RLCH2-01                  |
| RL-W423                                | N/A   | N/A                       |
| RL-W424                                | N/A   | N/A                       |
| RL-W425                                | N/A   | N/A                       |
| RL-W426                                | N/A   | N/A                       |
| RL-W427                                | N/A   | N/A                       |
| RL-W428                                | RL-W428   | RL105-07                  |

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b>                         | <b>2006 Waste Streams</b> |
|--|---|---------------------------|
| RL-W429                                | N/A   | N/A                       |
| RL-W430                                | N/A   | N/A                       |
| RL-W431                                | N/A   | N/A                       |
| RL-W432                                | N/A   | N/A                       |
| RL-W433                                | RL-W433   | RLCH2-08                  |
| RL-W434                                | N/A   | N/A                       |
| RL-W435                                | N/A   | N/A                       |
| RL-W436                                | RL-W436   | RLCH2-08                  |
| RL-W437                                | N/A   | N/A                       |
| RL-W438                                | RL-W438   | RLSWO-01                  |
| RL-W439                                | N/A   | N/A                       |
| RL-W440                                | RL-W445   | RL105-09                  |
| RL-W440                                | RL-W445   | RL105-09A                 |
| RL-W441                                | RL-W446   | RL105-07                  |
| RL-W442                                | RL-W748, RL-W749, RL-W750,<br>RL-W751, RL-W752, RL-W753 | RLCH2-05                  |
| RL-W443                                | N/A   | N/A                       |
| RL-W444                                | RL-W444   | RLCH2-01                  |
| N/A                                    | RL-W484   | RL202S-01                 |
| N/A                                    | RL-W486   | RL202S-01                 |
| N/A                                    | RL-W497   | RL233S-01                 |
| N/A                                    | RL-W579   | RL2718-01                 |
| N/A                                    | RL-W591   | RL308-03                  |
| N/A                                    | RL-W603   | RL324-01                  |
| N/A                                    | RL-W604   | RL324-01                  |
| N/A                                    | RL-W605   | RL324-01                  |
| N/A                                    | RL-W606   | RL324-01                  |
| N/A                                    | RL-W607   | RL324-01                  |
| N/A                                    | RL-W608   | RL324-01                  |
| N/A                                    | RL-W609   | Not reported in 2006      |
| N/A                                    | RL-W613   | RL324-07                  |
| N/A                                    | RL-W614   | RL324-08                  |
| N/A                                    | RL-W617   | RL324-07                  |
| N/A                                    | RL-W619   | RL324-08                  |
| N/A                                    | RL-W620   | RL324-07                  |
| N/A                                    | RL-W621   | RL324-08                  |
| N/A                                    | RL-W650   | Not reported in 2006      |
| N/A                                    | RL-W651   | Not reported in 2006      |
| N/A                                    | RL-W652   | Not reported in 2006      |
| N/A                                    | RL-W664   | RL325-08                  |
| N/A                                    | RL-W667   | Not reported in 2006      |

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b>   |
|--|---------------------------------|-----------------------------|
| N/A                                    | RL-W674                         | RL325-05                    |
| N/A                                    | RL-W675                         | RL327-01                    |
| N/A                                    | RL-W676                         | RL325-05                    |
| N/A                                    | RL-W677                         | RL327-05                    |
| N/A                                    | RL-W678                         | RL317-01                    |
| N/A                                    | RL-W679                         | RL327-01                    |
| N/A                                    | RL-W680                         | RL327-05                    |
| N/A                                    | RL-W681                         | RL327-01                    |
| N/A                                    | RL-W682                         | RL327-07                    |
| N/A                                    | RL-W683                         | RL327-07                    |
| N/A                                    | RL-W698                         | RL325-05                    |
| N/A                                    | RL-W711                         | RLESG-01                    |
| N/A                                    | RL-W730                         | RL325-05                    |
| RL-Z001                                | RL-Z001                         | RL-Z001, RL618-01, RL618-07 |
| N/A                                    | RL-Z002                         | Not reported in 2006        |
| N/A                                    | RL-Z003                         | Not reported in 2006        |
| N/A                                    | N/A                             | RLWTP-08                    |

### **F-2.7 Hanford Office of River Protection (RP)**

The Hanford tank waste is maintained by the DOE's Office of River Protection (RP) and the waste streams are designated with an "RP" identifier.

Table F-8 contains the crosswalk of waste streams beginning with the TWBIR, Revision 2, crosswalked to the TWBIR-2004 waste streams, and then crosswalked to the 2006 waste streams for the RP tank waste.

**Table F-8. Hanford Office of River Protection Waste Streams Crosswalk**

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b> |
|--|---------------------------------|---------------------------|
| N/A                                    | RP-W013                         | RP-W013                   |
| N/A                                    | RP-W016                         | RP-W016                   |
| N/A                                    | RP-W754                         | RP-W754                   |
| N/A                                    | RP-W755                         | RP-W755                   |
| N/A                                    | N/A                             | RP-TFC001                 |
| N/A                                    | N/A                             | RP-TFC002                 |
| N/A                                    | N/A                             | RP-TFC-003                |

### F-2.8 Idaho National Laboratory (INL) - Formerly Idaho National Engineering and Environmental Laboratory (INEEL)

Table F-9 contains the crosswalk of waste streams beginning with the TWBIR, Revision 2, crosswalked to the TWBIR-2004 waste streams, and then crosswalked to the 2006 waste streams for Idaho National Laboratory (INL).

**Table F-9. Idaho National Laboratory Waste Streams Crosswalk'**

| TWBIR, Revision 2 Waste Streams   | TWBIR-2004 Waste Streams | 2006 Waste Streams |
|---|--------------------------|--------------------|
| IN-W112   | N/A                      | N/A                |
| IN-W139.627, IN-W166.151, IN-W166.928, IN-W170.189, IN-W170.938, IN-W171.184, IN-W171.801, IN-W172.182, IN-W172.911, IN-W186.187, IN-W187.1094, IN-W187.121, IN-W189.1048, IN-W189.131, IN-W199.1039, IN-W199.209, IN-W202.1092, IN-W202.224, IN-W203.1081, IN-W203.210, IN-W203.211, IN-W203.212, IN-W205.1086, IN-W205.1087, IN-W205.220, IN-W225.127, IN-W225.800, IN-W259.552, IN-W259.920, IN-W260.565, IN-W260.566, IN-W260.567, IN-W260.568, IN-W260.916, IN-W265.516, IN-W265.517, IN-W269.510, IN-W269.535, IN-W278.1090, IN-W278.495, IN-W281.487, IN-W281.488, IN-W283.481, IN-W283.534, IN-W283.963, IN-W283.964, IN-W285.471, IN-W285.815, | IN-BN-510                | IN-BN510           |

| TWBIR, Revision 2 Waste Streams  | TWBIR-2004 Waste Streams | 2006 Waste Streams |
|--|--------------------------|--------------------|
| IN-W287.460, IN-W289.466, IN-W291.454, IN-W291.455, IN-W291.456, IN-W296.331, IN-W302.299, IN-W302.913, IN-W306.632, IN-W306.633, IN-W306.634, IN-W306.635, IN-W308.618, IN-W308.621, IN-W311.1013, IN-W311.604, IN-W312.602, IN-W312.942, IN-W314.1017, IN-W314.606, IN-W317.1028, IN-W317.1029, IN-W317.757, IN-W317.758, IN-W327.1085, IN-W327.735, IN-W334.675, IN-W334.961, IN-W336.660, IN-W336.820, IN-W338.657, IN-W338.956, IN-W339.655, IN-W339.955, IN-W345.669, IN-W345.819, IN-W351.648, IN-W351.922, IN-W354.1016, IN-W354.858, IN-W355.1015, IN-W355.857, IN-W356.1014, IN-W356.856, IN-W367.840, IN-W367.973, IN-W370.929, IN-W371.1018, IN-W371.831, IN-W373.1003, IN-W373.830, IN-W374.1091, IN-W374.829 |                          |                    |
| IN-W157.906, IN-W157.907, IN-W157.144  | IN-W157.144              | IN-BN004           |
| IN-W159.119, IN-W159.120, IN-W159.1072   | IN-W159.1072             | IN-W159.1072       |
| IN-W163.234, IN-W163.1007  | IN-W163.1007             | IN-W163.1007       |
| IN-W164.1060, IN-W164.153  | IN-W164.153              | IN-ID-S3150-A      |
| IN-W167.926, IN-W167.149   | IN-W167.149              | IN-ID-RF-S3114     |
| IN-W174.1082, IN-W174.154  | IN-W174.154              | IN-BN835           |
| IN-W177.1083, IN-W177.156  | IN-W177.156              | IN-BN835           |
| IN-W179.1084, IN-W179.158  | IN-W179.158              | IN-BN836           |
| IN-W188.1093, IN-W188.160  | IN-W188.160              | IN-BN510           |
| IN-W216.875, IN-W216.98, IN-W216.99, IN-W306.817, IN-W308.816  | IN-W216.98               | IN-BNINW216        |
| IN-W218.109, IN-W218.909   | IN-W218.909              | IN-BNINW218        |
| IN-W220.925, IN-W220.114   | IN-W220.114              | IN-BNINW218        |
| IN-W221.113, IN-W221.927   | IN-W221.927              | IN-BN004           |
| IN-W222.117, IN-W222.965, IN-W222.116  | IN-W222.116              | IN-W222.116        |

| <b>TWBIR, Revision 2 Waste Streams</b>  | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b> |
|---|---------------------------------|---------------------------|
| IN-W228.102, IN-W228.103, IN-W228.883, IN-W228.884, IN-W228.885, IN-W228.886, IN-W306.817, IN-W308.816, IN-W228.101 | IN-W228.101                     | IN-BNINW216               |
| IN-W240.272, IN-W240.931  | IN-W240.931                     | IN-BN243, IN-BN510        |
| IN-W243.274, IN-W243.275, IN-W243.276, IN-W243.277, IN-W243.808   | IN-W243.808                     | IN-BN243, IN-BN510        |
| IN-W245.1034, IN-W245.1035, IN-W245.302, IN-W245.301  | IN-W245.301                     | IN-ID-RF-S5100-A          |
| IN-W247.1038, IN-W247.523, IN-W247.524, IN-W247.810   | IN-W247.810                     | IN-ID-RF-S5100-A          |
| IN-W249.528, IN-W249.527, IN-W249.1071  | IN-W249.527                     | IN-BN304, IN-BN510        |
| IN-W257.558, IN-W257.947  | IN-INTEC-SFS-01                 | IN-INTEC-SFS-01           |
| IN-W259.921, IN-W349.667, IN-W349.924   | IN-AE-AGHF-01                   | IN-AE-AGHF-01             |
| IN-W267.514, IN-W267.1005   | IN-W267.1005                    | IN-W267.1005              |
| IN-W309.610, IN-W308.816, IN-W306.817, IN-W309.609  | IN-W309.609                     | IN-ID-RF-3114             |
| IN-W319.583, IN-W319.584  | IN-W319.584                     | IN-W319.584               |
| IN-W321.578, IN-W321.1023   | IN-W321.1023                    | IN-W321.1023              |
| IN-W332.962, IN-W332.661  | IN-W332.661                     | IN-W332.661               |
| IN-W347.646, IN-W347.818  | IN-W347.818                     | IN-W347.818               |
| IN-W348.846, IN-W348.1012   | IN-W348.1012                    | IN-W348.1012              |
| IN-W357.850, IN-W357.1022   | IN-W357.1022                    | IN-W357.1022              |
| IN-W361.849, IN-W361.1021   | IN-W361.1021                    | IN-W361.1021              |
| IN-W362.848, IN-W362.1020   | IN-W362.1020                    | IN-W362.1020              |
| IN-W363.847, IN-W363.1019   | IN-W363.1019                    | IN-W363.1019              |
| IN-W364.844, IN-W364.845, IN-W364.1011  | IN-W364.1011                    | IN-W364.1011              |
| IN-W365.842, IN-W365.843, IN-W365.1010  | IN-W365.1010                    | IN-W365.1010              |
| IN-W366.1004, IN-W366.841   | IN-W366.841                     | IN-W366.841               |
| IN-W375.827, IN-W375.1096   | IN-W375.1096                    | IN-W375.1096              |
| IN-W263.520   | IN-W263.520                     | IN-W263.520               |
| IN-W353.859   | IN-W353.859                     | IN-W353.859               |
| IN-W315.601   | IN-W315.601                     | IN-W315.601               |
| IN-W181.162   | IN-W181.162                     | IN-W181.162               |
| IN-W219.110   | IN-W219.110                     | IN-W219.110               |
| IN-W219.914   | IN-W219.914                     | IN-W219.914               |
| IN-W322.851   | IN-W322.851                     | IN-W322.851               |
| IN-W322.952   | IN-W322.952                     | IN-W322.952               |

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b>              |
|--|---------------------------------|--|
| IN-W323.562                            | IN-W323.562                     | IN-W323.562                            |
| IN-W323.951                            | IN-W323.951                     | IN-W323.951                            |
| IN-W337.673                            | IN-W337.673                     | IN-W337.673                            |
| IN-W337.957                            | IN-W337.957                     | IN-W337.957                            |
| IN-W341.671                            | IN-W341.671                     | IN-W341.671                            |
| IN-W341.954                            | IN-W341.954                     | IN-W341.954                            |
| IN-W342.652                            | IN-W342.652                     | IN-W342.652                            |
| IN-W342.953                            | IN-W342.953                     | IN-W342.953                            |
| IN-W358.854                            | IN-W358.854                     | IN-W358.854                            |
| IN-W358.855                            | IN-W358.855                     | IN-W358.855                            |
| IN-W358.948                            | IN-W358.948                     | IN-W358.948                            |
| IN-W358.949                            | IN-W358.949                     | IN-W358.949                            |
| IN-W372.832                            | IN-W372.832                     | IN-W372.832                            |
| IN-W372.918                            | IN-W372.918                     | IN-W372.918                            |
| N/A                                    | IN-NRF-153                      | IN-NRF-153                             |
| N/A                                    | IN-TRA-150                      | IN-TRA-150                             |
| N/A                                    | IN-TRA-157                      | IN-TRA-157                             |
| N/A                                    | IN-AW-161                       | IN-AW-161                              |
| IN-Z001                                | IN-GEM-01                       | IN-GEM-01                              |
| IN-Z001                                | IN-GEM-02                       | IN-GEM-02                              |
| IN-W325.1076                           | IN-W325.1076                    | IN-W325.1076                           |
| IN-W325.679                            | IN-W325.679                     | IN-W325.679                            |
| IN-W350.650                            | IN-W350.650                     | IN-W350.650                            |
| IN-W350.923                            | IN-W350.923                     | IN-W350.923                            |
| IN-W353.917                            | IN-W353.917                     | IN-W353.917                            |
| IN-W359.853                            | IN-W359.853                     | IN-W359.853                            |
| IN-W360.852                            | IN-W360.852                     | IN-W360.852                            |
| IN-W360.912                            | IN-W360.912                     | IN-W360.912                            |
| IN-W146.699                            | IN-W146.699                     | IN-W146.699                            |
| N/A                                    | IN-SBW-01A                      | IN-SBW-01A                             |
| N/A                                    | IN-SBW-01B                      | IN-SBW-01B                             |
| N/A                                    | IN-TRA-BE-01                    | AW-IN-TRA-BE-01—<br>transferred to MFC |
| IN-Z001                                | IN-Z001                         | ID-SDA-Sludge, ID-SDA-<br>Debris       |
| N/A                                    | IN-Z001A                        | ID-SDA-Sludge, ID-SDA-<br>Debris       |
| N/A                                    | IN-ICP-002                      | ID-SDA-Sludge                          |
| N/A                                    | IN-ICP-003                      | ID-SDA-Sludge                          |
| N/A                                    | IN-ICP-004                      | ID-SDA- Debris                         |
| N/A                                    | IN-ICP-005                      | ID-SDA-Debris                          |
| IN-W208.243                            | IN-BN510                        | IN-W208.243                            |



| <b>TWBIR, Revision 2 Waste Streams</b>   | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b> |
|--|---------------------------------|---------------------------|
| IN-W252.282  | IN-BN510                        | IN-W252.282               |
| IN-W254.1045   | IN-BN510                        | IN-W254.1045              |
| IN-W294.343  | IN-BN510                        | IN-W294.343               |
| IN-W296.318  | IN-BN510                        | IN-W296.318               |
| IN-W296.330  | IN-BN510                        | IN-W296.330               |
| IN-W206.935, IN-W206.936, IN-W207.238, IN-W207.980, IN-W207.981, IN-W208.242, IN-W208.988, IN-W209.994, IN-W210.1001, IN-W210.247, IN-W210.1009, IN-W211.249, IN-W212.1058, IN-W212.251  | IN-BN510                        | IN-BN211, IN-BN510        |
| IN-W213.1069, 213.252, IN-W213.253, IN-W214.1075, IN-W214.755, IN-214.756, IN-W256.1062, IN-W256.295, IN-W271.532, IN-W271.533, IN-W280.1066, IN-W280.448, IN-W280.449, IN-W304.860, IN-W304.861, IN-W305.1068, IN-W305.828, IN-W329.681, IN-W329.682, IN-W330.667, IN-W330.678, IN-W204.215, IN-W204.216, IN-W204.217, IN-W249.527, IN-W249.528 | IN-BN510                        | IN-BN304, IN-BN510        |
| IN-W250.259, IN-W250.941, IN-W252.1000, IN-W252.283, IN-W252.811, IN-W254.1044, IN-W254.289, IN-W254.290   | IN-BN510                        | IN-BN252, IN-BN510        |
| IN-W294.1057, IN-W294.342, IN-W294.814, IN-W296.327, IN-W296.329, IN-W296.813, IN-W298.317, IN-W298.812, IN-W298.979, IN-W300.308, IN-W300.930   | IN-BN510                        | IN-BN296, IN-BN510        |
| IN-W169.191, IN-W169.192, IN-W169.193, IN-W169.194, IN-W169.985, IN-W197.196, IN-W197.197, IN-W197.198, IN-W197.802, IN-W197.803, IN-198.202, IN-W198.203, IN-W198.204, IN-W198.205, IN-W198.804   | IN-BN510                        | IN-ID-S5300-A             |
| IN-W370.836, IN-W272.504, IN-W272.974, IN-W275.502, IN-W275.967, IN-W276.500, IN-W276.966, IN-W368.839, IN-W368.971, IN-W369.837, IN-W369.970  | IN-BN510                        | IN-ID-RF-S5126            |
| IN-W161.231, IN-W161.806, IN-  | IN-BN510                        | IN-BN161, IN-BN510        |

| TWBIR, Revision 2 Waste Streams | TWBIR-2004 Waste Streams | 2006 Waste Streams |
|---------------------------------|--------------------------|--------------------|
| W230.229, IN-W230.940           |                          |                    |
| IN-W216.876,                    | IN-W216.98               | IN-W216.876        |
| IN-W216.877                     | IN-W216.98               | IN-W216.877        |

### F-2.91.10 Knolls Atomic Power Laboratory (KAPL)

Table F-10 contains the crosswalk of waste streams beginning with the TWBIR, Revision 2, crosswalked to the TWBIR-2004 waste streams, and then crosswalked to the 2006 waste streams for Knolls Atomic Power Laboratory (KAPL).

**Table F-10. Knolls Atomic Power Laboratory Waste Streams Crosswalk**

| TWBIR, Revision 2 Waste Streams | TWBIR-2004 Waste Streams | 2006 Waste Streams |
|---------------------------------|--------------------------|--------------------|
| KA-T001                         | KA-T001                  | KA-T001            |
| KA-W016                         | KA-W016                  | KA-W016            |

### F-2.10 Knolls Atomic Power Laboratory-Nuclear Fuel Services (KAPL-NFS)

Table F-11 contains the crosswalk of waste streams beginning with the TWBIR, Revision 2, crosswalked to the TWBIR-2004 waste streams, and then crosswalked to the 2006 waste streams for Knolls Atomic Power Laboratory-Nuclear Fuel Services (KAPL-NFS).

**Table F-11. Knolls Atomic Power Laboratory-Nuclear Fuel Services Waste Streams Crosswalk**

| TWBIR, Revision 2 Waste Streams | TWBIR-2004 Waste Streams | 2006 Waste Streams |
|---------------------------------|--------------------------|--------------------|
| N/A                             | KN-B234TRU               | KN-B234TRU         |
| N/A                             | KN-B234PCBTRU            | KN-B234PCBTRU      |

### F-2.11 Lawrence Livermore National Laboratory (LLNL)

Table F-12 contains the crosswalk of waste streams beginning with the TWBIR, Revision 2, crosswalked to the TWBIR-2004 waste streams, and then crosswalked to the 2006 waste streams for Lawrence Livermore National Laboratory (LLNL).

**Table F-12. Lawrence Livermore National Laboratory Waste Streams Crosswalk**

| TWBIR, Revision 2 Waste Streams | TWBIR-2004 Waste Streams | 2006 Waste Streams |
|---------------------------------|--------------------------|--------------------|
| LL-M001                         | LL-M001                  | LL-T002, LL-T005   |
| LL-T001                         | LL-T001                  | LL-T001            |
| LL-T002                         | LL-M001                  | LLM001             |

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b> |
|--|---------------------------------|---------------------------|
| LL-T003                                | LL-T003                         | LL-T003                   |
| LL-T004                                | LL-T004                         | LL-T004                   |
| LL-T005                                | LL-T005: LL-W034                | LL-M001                   |
| LL-W018                                | LL-W018                         | LL-W018a                  |
| LL-W019                                | LL-W019                         | LL-W019                   |
| N/A                                    | N/A                             | LL-W018b                  |

### F-2.12 Los Alamos National Laboratory (LANL)

Table F-13 contains the crosswalk of waste streams beginning with the TWBIR, Revision 2, crosswalked to the TWBIR-2004 waste streams, and then crosswalked to the 2006 waste streams for Los Alamos National Laboratory (LANL).

**Table F-13. Los Alamos National Laboratory Waste Streams Crosswalk**

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b>  |
|--|---------------------------------|--|
| LA-M002                                | LA-TA-00-05                     | LA-TA-03-12, LA-TA-55-19, LA-TA-50-19, LA-TA-21-06, LA-TA-21-06, LA-TA-21-12, LA-TA-21-07, LA-TA-55-30, LA-TA-21-13, LA-TA-21-15, LA-TA-21-16, LA-TA-21-17 |
| LA-M002                                | LA-TA-03-28                     | LA-TA-03-28  |
| LA-M002                                | LA-TA-21-13                     | LA-TA-21-13  |
| LA-M002                                | LA-TA-21-43                     | LA-TA-21-13  |
| LA-M002                                | LA-TA-50-17                     | LA-TA-50-17  |
| LA-M002                                | LA-TA-50-18                     | LA-TA-50-18  |
| LA-M002                                | LA-TA-55-30                     | LA-TA-55-30  |
| LA-T001                                | LA-TA-00-01                     | LA-TA-00-01  |
| LA-T001                                | Not reported in 2004            | LA-TA-21-11  |
| LA-T001                                | LA-TA-21-42                     | Not reported in 2006   |
| LA-T001                                | LA-TA-50-11                     | Not reported in 2006   |
| LA-T001                                | Not reported in 2004            | LA-TA-50-12  |
| LA-T001                                | LA-TA-50-15                     | LA-TA-50-15  |
| LA-T001                                | Not reported in 2004            | LA-TA-50-16  |
| LA-T001                                | LA-TA-55-19                     | Not reported in 2006   |
| LA-T001                                | Not reported in 2004            | LA-TA-55-21  |
| LA-T001                                | Not reported in 2004            | LA-TA-55-27  |
| LA-T001                                | LA-TA-55-30                     | Not reported in 2006   |
| LA-T001                                | LA-TA-55-44                     | LA-TA-55-44  |
| LA-T002                                | Not reported in 2004            | LA-TA-03-01  |
| LA-T002                                | LA-TA-50-17                     | LA-TA-50-17  |

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b>  |
|--|---------------------------------|--|
| LA-T002                                | Not reported in 2004            | LA-TA-55-17B   |
| N/A                                    | LA-OS-00-01                     | LA-OS-00-01  |
| LA-T004                                | LA-IT-00-01                     | LA-TA-00-01  |
| LA-T004                                | LA-PX-00-01                     | LA-PX-00-01  |
| LA-T004                                | LA-TA-00-02                     | LA-TA-00-02  |
| LA-T004                                | LA-TA-00-05                     | LA-TA-03-12, LA-TA-55-19,<br>LA-TA-55-01, LA-TA-21-06,<br>LA-TA-21-12, LA-TA-21-07,<br>LA-TA-55-30, LA-TA-21-13,<br>LA-TA-21-15, LA-TA-21-16,<br>LA-TA-21-17   |
| LA-T004                                | LA-TA-00-06                     | LA-TA-03-13, LA-TA-03-14,<br>LA-TA-55-01, LA-TA-55-03,<br>LA-TA-55-04, LA-TA-55-05,<br>LA-TA-55-07, LA-TA-55-08,<br>LA-TA-55-09, LA-TA-55-12,<br>LA-TA-55-17B, LA-TA-55-25,<br>LA-TA-55-50, LANHD02238,<br>LAMHD01 |
| LA-T004                                | LA-TA-00-07                     | LA-TA-03-12, LA-TA-03-13,<br>LA-TA-03-14, LA-TA-03-15,<br>LA-TA-50-17, LA-TA-55-05,<br>LA-TA-55-60, LAMHD03  |
| LA-T004                                | Not reported in 2004            | LA-TA-03-03  |
| LA-T004                                | Not reported in 2004            | LA-TA-03-05  |
| LA-T004                                | Not reported in 2004            | LA-TA-03-10  |
| LA-T004                                | LA-TA-03-12                     | LA-TA-03-12  |
| LA-T004                                | LA-TA-03-13                     | LA-TA-03-13  |
| LA-T004                                | LA-TA-03-19                     | LA-TA-03-19  |
| LA-T004                                | LA-TA-03-20                     | LA-TA-03-20  |
| LA-T004                                | LA-TA-03-24                     | LA-TA-03-24  |
| LA-T004                                | LA-TA-03-26                     | Not reported in 2006   |
| LA-T004                                | LA-TA-03-30                     | LA-TA-03-30  |
| LA-T004                                | LA-TA-21-06                     | LA-TA-21-06  |
| LA-T004                                | LA-TA-21-12                     | LA-TA-21-12  |
| LA-T004                                | LA-TA-21-15                     | LA-TA-21-15  |
| LA-T004                                | Not reported in 2004            | LA-TA-21-40  |
| LA-T004                                | LA-TA-21-42                     | Not reported in 2006   |
| LA-T004                                | LA-TA-48-01                     | LA-TA-48-01  |
| LA-T004                                | Not reported in 2004            | LA-TA-50-02  |
| LA-T004                                | LA-TA-50-11                     | LA-TA-50-11  |
| LA-T004                                | LA-TA-50-15                     | LA-TA-50-15  |
| LA-T004                                | LA-TA-50-40                     | Not reported in 2006   |
| LA-T004                                | LA-TA-55-19                     | LA-TA-55-19  |
| LA-T004                                | LA-TA-55-20                     | LA-TA-55-20  |

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b>  |
|--|---------------------------------|--|
| LA-T004                                | LA-TA-55-21                     | Not reported in 2006   |
| LA-T004                                | LA-TA-55-30                     | LA-TA-55-30  |
| LA-T004                                | LA-TA-55-33                     | LA-TA-55-33  |
| LA-T004                                | LA-TA-55-38                     | Not reported in 2006   |
| LA-T004                                | LA-TA-55-43                     | LA-TA-55-43  |
| LA-T004                                | LA-TA-55-44                     | LA-TA-55-44  |
| LA-T004                                | LA-TA-55-48                     | LA-TA-55-19, LA-TA-55-30,<br>LA-TA-55-33, LA-TA-55-42  |
| LA-T004                                | LA-TA-55-49                     | LA-TA-55-14, LA-TA-55-15,<br>LA-TA-55-19, LA-TA-55-23,<br>LA-TA-55-30, LA-TA-55-32,<br>LA-TA-55-36, LA-TA-55-38,<br>LA-TA-55-39, LAMHD01   |
| LA-T004                                | Not reported in 2004            | LA-TA-55-54  |
| LA-T004                                | LA-TA-55-56                     | LA-TA-55-56  |
| LA-T005                                | LA-IT-00-01                     | LA-TA-00-01  |
| LA-T005                                | LA-SL-00-01                     | LA-TA-00-01  |
| LA-T005                                | LA-TA-00-01                     | LA-TA-00-01  |
| LA-T005                                | LA-TA-00-02                     | LA-TA-00-02  |
| LA-T005                                | LA-TA-00-04                     | LA-TA-00-01  |
| LA-T005                                | LA-TA-00-05                     | LA-TA-03-12, LA-TA-55-19,<br>LA-TA-55-01, LA-TA-21-06,<br>LA-TA-21-12, LA-TA-21-07,<br>LA-TA-55-30, LA-TA-21-13,<br>LA-TA-21-15, LA-TA-21-16,<br>LA-TA-21-17   |
| LA-T005                                | LA-TA-00-06                     | LA-TA-03-13, LA-TA-03-14,<br>LA-TA-55-01, LA-TA-55-03,<br>LA-TA-55-04, LA-TA-55-05,<br>LA-TA-55-07, LA-TA-55-08,<br>LA-TA-55-09, LA-TA-55-12,<br>LA-TA-55-17B, LA-TA-55-25,<br>LA-TA-55-50, LANHD02238,<br>LAMHD01 |
| LA-T005                                | LA-TA-00-07                     | LA-TA-03-12, LA-TA-03-13,<br>LA-TA-03-14, LA-TA-03-15,<br>LA-TA-50-17, LA-TA-55-05,<br>LA-TA-55-60, LAMHD03  |
| LA-T005                                | Not reported in 2004            | LA-TA-03-05  |
| LA-T005                                | Not reported in 2004            | LA-TA-03-07  |
| LA-T005                                | Not reported in 2004            | LA-TA-03-08  |
| LA-T005                                | Not reported in 2004            | LA-TA-03-10  |
| LA-T005                                | Not reported in 2004            | LA-TA-03-16  |
| LA-T005                                | Not reported in 2004            | LA-TA-03-17  |
| LA-T005                                | Not reported in 2004            | LA-TA-03-18  |
| LA-T005                                | LA-TA-03-19                     | LA-TA-03-19  |

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b>  |
|--|---------------------------------|--|
| LA-T005                                | LA-TA-03-20                     | Not reported in 2006   |
| LA-T005                                | Not reported in 2004            | LA-TA-03-21  |
| LA-T005                                | Not reported in 2004            | LA-TA-03-23  |
| LA-T005                                | LA-TA-03-24                     | LA-TA-03-24  |
| LA-T005                                | Not reported in 2004            | LA-TA-03-33  |
| LA-T005                                | LA-TA-03-42                     | Not reported in 2006   |
| LA-T005                                | Not reported in 2004            | LA-TA-21-05  |
| LA-T005                                | Not reported in 2004            | LA-TA-21-08  |
| LA-T005                                | Not reported in 2004            | LA-TA-21-09  |
| LA-T005                                | Not reported in 2004            | LA-TA-21-10  |
| LA-T005                                | LA-TA-21-12                     | LA-TA-21-12  |
| LA-T005                                | LA-TA-48-01                     | LA-TA-48-01  |
| LA-T005                                | LA-TA-50-11                     | Not reported in 2006   |
| LA-T005                                | Not reported in 2004            | LA-TA-50-12  |
| LA-T005                                | Not reported in 2004            | LA-TA-50-13  |
| LA-T005                                | Not reported in 2004            | LA-TA-50-14  |
| LA-T005                                | Not reported in 2004            | LA-TA-50-16  |
| LA-T005                                | Not reported in 2004            | LA-TA-55-18  |
| LA-T005                                | LA-TA-55-19                     | LA-TA-55-19  |
| LA-T005                                | LA-TA-55-20                     | Not reported in 2006   |
| LA-T005                                | LA-TA-55-21                     | LA-TA-55-21  |
| LA-T005                                | LA-TA-55-22                     | LA-TA-55-22  |
| LA-T005                                | LA-TA-55-23                     | LA-TA-55-23  |
| LA-T005                                | LA-TA-55-24                     | LA-TA-55-24  |
| LA-T005                                | LA-TA-55-25                     | LA-TA-55-25  |
| LA-T005                                | Not reported in 2004            | LA-TA-55-26  |
| LA-T005                                | LA-TA-55-28                     | Not reported in 2006   |
| LA-T005                                | LA-TA-55-30                     | LA-TA-55-30  |
| LA-T005                                | Not reported in 2004            | LA-TA-55-31  |
| LA-T005                                | LA-TA-55-32                     | Not reported in 2006   |
| LA-T005                                | LA-TA-55-33                     | Not reported in 2006   |
| LA-T005                                | LA-TA-55-34                     | LA-TA-55-34  |
| LA-T005                                | LA-TA-55-38                     | Not reported in 2006   |
| LA-T005                                | LA-TA-55-39                     | LA-TA-55-39  |
| LA-T005                                | Not reported in 2004            | LA-TA-55-42  |
| LA-T005                                | LA-TA-55-43                     | LA-TA-55-43  |
| LA-T005                                | LA-TA-55-44                     | LA-TA-55-44  |
| LA-T005                                | LA-TA-55-49                     | LA-TA-55-14, LA-TA-55-15,<br>LA-TA-55-19, LA-TA-55-23,<br>LA-TA-55-30, LA-TA-55-32,<br>LA-TA-55-36, LA-TA-55-38,<br>LA-TA-55-39, LAMHD01 |

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b>  |
|--|---------------------------------|--|
| LA-T005                                | LA-TA-55-53                     | Not reported in 2006   |
| LA-T005                                | LA-TA-55-56                     | LA-TA-55-56  |
| LA-T005                                | LA-TA-55-60                     | LA-TA-55-60  |
| LA-T006                                | Not reported in 2004            | LA-TA-00-01  |
| LA-T006                                | LA-TA-00-02                     | LA-TA-00-02  |
| LA-T006                                | LA-TA-00-05                     | LA-TA-03-12, LA-TA-55-19,<br>LA-TA-55-01, LA-TA-21-06,<br>LA-TA-21-12, LA-TA-21-07,<br>LA-TA-55-30, LA-TA-21-13,<br>LA-TA-21-15, LA-TA-21-16,<br>LA-TA-21-17 |
| LA-T006                                | Not reported in 2004            | LA-TA-03-10  |
| LA-T006                                | Not reported in 2004            | LA-TA-03-28  |
| LA-T006                                | Not reported in 2004            | LA-TA-21-09  |
| LA-T006                                | LA-TA-21-15                     | LA-TA-21-15  |
| LA-T006                                | LA-TA-21-12                     | Not reported in 2006   |
| LA-T006                                | LA-TA-48-01                     | LA-TA-48-01  |
| LA-T006                                | LA-TA-50-15                     | LA-TA-50-15  |
| LA-T006                                | LA-TA-55-30                     | LA-TA-55-30  |
| LA-T006                                | LA-TA-55-32                     | LA-TA-55-32  |
| LA-T006                                | LA-TA-55-33                     | LA-TA-55-33  |
| LA-T006                                | Not reported in 2004            | LA-TA-55-36  |
| LA-T006                                | Not reported in 2004            | LA-TA-55-37  |
| LA-T006                                | LA-TA-55-38                     | Not reported in 2006   |
| LA-T006                                | LA-TA-55-44                     | LA-TA-55-44  |
| LA-T006                                | LA-TA-55-49                     | LA-TA-55-14, LA-TA-55-15,<br>LA-TA-55-19, LA-TA-55-23,<br>LA-TA-55-30, LA-TA-55-32,<br>LA-TA-55-36, LA-TA-55-38,<br>LA-TA-55-39, LAMHD01                     |
| LA-T007                                | LA-TA-03-24                     | Not reported in 2006   |
| LA-T007                                | LA-TA-03-26                     | LA-TA-03-26  |
| LA-T007                                | Not reported in 2004            | LA-LAMHD03   |
| LA-T008                                | LA-TA-00-01                     | LA-TA-00-01  |
| LA-T008                                | LA-TA-03-29                     | LA-TA-03-29  |
| LA-T008                                | LA-TA-21-14                     | LA-TA-21-14  |
| LA-T008                                | LA-TA-21-41                     | Not reported in 2006   |
| LA-T008                                | LA-TA-21-44                     | LA-TA-21-14  |
| LA-T008                                | LA-TA-50-20                     | LA-TA-50-20  |
| LA-T009                                | LA-IT-00-01                     | LA-TA-00-01  |
| LA-T009                                | LA-OS-00-02                     | LA-OS-00-03  |
| LA-T009                                | LA-TA-00-01                     | LA-TA-00-01  |
| LA-T009                                | LA-TA-00-02                     | LA-TA-00-02  |

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b>   |
|--|---------------------------------|---|
| LA-T009                                | LA-TA-00-04                     | LA-TA-00-01   |
| LA-T009                                | LA-TA-00-07                     | LA-TA-03-12, LA-TA-03-13,<br>LA-TA-03-14, LA-TA-03-15,<br>LA-TA-50-17, LA-TA-55-05,<br>LA-TA-55-60, LAMHD03 |
| LA-T009                                | Not reported in 2004            | LA-TA-03-10   |
| LA-T009                                | LA-TA-03-12                     | LA-TA-03-12   |
| LA-T009                                | LA-TA-03-13                     | Not reported in 2006  |
| LA-T009                                | Not reported in 2004            | LA-TA-03-16   |
| LA-T009                                | LA-TA-03-19                     | LA-TA-03-19   |
| LA-T009                                | LA-TA-03-20                     | LA-TA-03-20   |
| LA-T009                                | Not reported in 2004            | LA-TA-03-21   |
| LA-T009                                | LA-TA-03-24                     | LA-TA-03-24   |
| LA-T009                                | Not reported in 2004            | LA-TA-03-25   |
| LA-T009                                | LA-TA-03-26                     | LA-TA-03-26   |
| LA-T009                                | Not reported in 2004            | LA-TA-03-32   |
| LA-T009                                | Not reported in 2004            | LA-TA-03-34   |
| LA-T009                                | LA-TA-03-40                     | Not reported in 2006  |
| LA-T009                                | LA-TA-03-42                     | LA-TA-03-42   |
| LA-T009                                | Not reported in 2004            | LA-TA-21-07   |
| LA-T009                                | LA-TA-21-12                     | Not reported in 2006  |
| LA-T009                                | LA-TA-21-41                     | LA-TA-21-41   |
| LA-T009                                | LA-TA-21-42                     | LA-TA-21-42   |
| LA-T009                                | LA-TA-21-44                     | LA-TA-21-14   |
| LA-T009                                | LA-TA-50-11                     | Not reported in 2006  |
| LA-T009                                | Not reported in 2004            | LA-TA-50-12   |
| LA-T009                                | Not reported in 2004            | LA-TA-50-14   |
| LA-T009                                | LA-TA-50-15                     | LA-TA-50-15   |
| LA-T009                                | LA-TA-50-17                     | LA-TA-50-17   |
| LA-T009                                | LA-TA-50-19                     | LA-TA-50-19   |
| LA-T009                                | LA-TA-50-41                     | LA-TA-50-41   |
| LA-T009                                | Not reported in 2004            | LA-TA-55-18   |
| LA-T009                                | LA-TA-55-19                     | LA-TA-55-19   |
| LA-T009                                | Not reported in 2004            | LA-TA-55-21   |
| LA-T009                                | Not reported in 2004            | LA-TA-55-25   |
| LA-T009                                | LA-TA-55-30                     | LA-TA-55-30   |
| LA-T009                                | Not reported in 2004            | LA-TA-55-31   |
| LA-T009                                | LA-TA-55-33                     | Not reported in 2006  |
| LA-T009                                | LA-TA-55-34                     | LA-TA-55-34   |
| LA-T009                                | LA-TA-55-38                     | Not reported in 2006  |
| LA-T009                                | LA-TA-55-44                     | LA-TA-55-44   |
| LA-T009                                | LA-TA-55-48                     | LA-TA-55-19, LA-TA-55-30,   |



| <b>TWBIR, Revision 2 Waste Streams</b>      | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b>   |
|---|---------------------------------|---|
|   |                                 | LA-TA-55-33, LA-TA-55-42  |
| LA-T009                                     | LA-TA-55-49                     | LA-TA-55-14, LA-TA-55-15, LA-TA-55-19, LA-TA-55-23, LA-TA-55-30, LA-TA-55-32, LA-TA-55-36, LA-TA-55-38, LA-TA-55-39, LAMHD01                  |
| LA-T009                                     | LA-TA-55-53                     | Not reported in 2006  |
| LA-T009                                     | LA-TA-55-56                     | LA-TA-55-56   |
| LA-T009                                     | LA-TA-55-60                     | LA-TA-55-60   |
| LA-T009                                     | LA-TA-55-62                     | LA-TA-55-62   |
| LA-T009                                     | LA-TA-55-63                     | LA-TA-55-63   |
| LA-TR04                                     | LA-TA-03-27                     | LA-TA-03-27   |
| LA-TR05                                     | LA-TA-03-27                     | LA-TA-03-27   |
| LATR07                                      | LA-TA-00-02                     | LA-TA-00-02   |
| LATR07                                      | LA-TA-03-27                     | LA-TA-03-27   |
| LA-W001 is LA-M001 (This is LANL Local ID.) | LA-TA-00-02                     | LA-TA-00-02   |
| LA-W001 is LA-M001 (This is LANL Local ID.) | LA-TA-00-04                     | LA-TA-00-01   |
| LA-W001 is LA-M001 (This is LANL Local ID.) | LA-TA-00-05                     | LA-TA-03-12, LA-TA-55-19, LA-TA-55-01, LA-TA-21-06, LA-TA-21-12, LA-TA-21-07, LA-TA-55-30, LA-TA-21-13, LA-TA-21-15, LA-TA-21-16, LA-TA-21-17 |
| LA-W001 is LA-M001 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-03-10   |
| LA-W001 is LA-M001 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-03-14   |
| LA-W001 is LA-M001 (This is LANL Local ID.) | LA-TA-03-19                     | Not reported in 2006  |
| LA-W001 is LA-M001 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-03-21   |
| LA-W001 is LA-M001 (This is LANL Local ID.) | LA-TA-03-24                     | Not reported in 2006  |
| LA-W001 is LA-M001 (This is LANL Local ID.) | LA-TA-03-40                     | Not reported in 2006  |
| LA-W001 is LA-M001 (This is LANL Local ID.) | LA-TA-21-12                     | Not reported in 2006  |
| LA-W001 is LA-M001 (This is LANL Local ID.) | LA-TA-21-40                     | Not reported in 2006  |
| LA-W001 is LA-M001 (This is LANL Local ID.) | LA-TA-21-42                     | Not reported in 2006  |
| LA-W001 is LA-M001 (This is LANL Local ID.) | LA-TA-49-01                     | LA-TA-00-01   |
| LA-W001 is LA-M001 (This is LANL Local ID.) | LA-TA-50-11                     | Not reported in 2006  |

| <b>TWBIR, Revision 2 Waste Streams</b>      | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b>   |
|---|---------------------------------|---|
| Local ID.)                                  |                                 |   |
| LA-W001 is LA-M001 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-50-12   |
| LA-W001 is LA-M001 (This is LANL Local ID.) | LA-TA-50-15                     | LA-TA-50-15   |
| LA-W001 is LA-M001 (This is LANL Local ID.) | LA-TA-50-40                     | Not reported in 2006  |
| LA-W001 is LA-M001 (This is LANL Local ID.) | LA-TA-55-19                     | Not reported in 2006  |
| LA-W001 is LA-M001 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-55-21   |
| LA-W001 is LA-M001 (This is LANL Local ID.) | LA-TA-55-30                     | LA-TA-55-30   |
| LA-W001 is LA-M001 (This is LANL Local ID.) | LA-TA-55-44                     | LA-TA-55-44   |
| LA-W001 is LA-M001 (This is LANL Local ID.) | Not reported in 2004            | LA-LAMHD01  |
| LA-W003 is LA-M003 (This is LANL Local ID.) | LA-TA-00-01                     | LA-TA-00-01   |
| LA-W003 is LA-M003 (This is LANL Local ID.) | LA-TA-00-05                     | LA-TA-03-12, LA-TA-55-19, LA-TA-55-01, LA-TA-21-06, LA-TA-21-12, LA-TA-21-07, LA-TA-55-30, LA-TA-21-13, LA-TA-21-15, LA-TA-21-16, LA-TA-21-17   |
| LA-W003 is LA-M003 (This is LANL Local ID.) | LA-TA-21-43                     | LA-TA-21-13   |
| LA-W003 is LA-M003 (This is LANL Local ID.) | LA-TA-50-10                     | LA-TA-50-10   |
| LA-W003 is LA-M003 (This is LANL Local ID.) | LA-TA-50-19                     | LA-TA-50-19   |
| LA-W004 is LA-M004 (This is LANL Local ID.) | LA-TA-00-05                     | LA-TA-03-12, LA-TA-55-19, LA-TA-55-01, LA-TA-21-06, LA-TA-21-12, LA-TA-21-07, LA-TA-55-30, LA-TA-21-13, LA-TA-21-15, LA-TA-21-16, LA-TA-21-17   |
| LA-W004 is LA-M004 (This is LANL Local ID.) | LA-TA-00-06                     | LA-TA-03-13, LA-TA-03-14, LA-TA-55-01, LA-TA-55-03, LA-TA-55-04, LA-TA-55-05, LA-TA-55-07, LA-TA-55-08, LA-TA-55-09, LA-TA-55-12, LA-TA-55-17B, LA-TA-55-25, LA-TA-55-50, LANHD02238, LAMHD01 |
| LA-W004 is LA-M004 (This is LANL Local ID.) | LA-TA-00-07                     | LA-TA-03-12, LA-TA-03-13, LA-TA-03-14, LA-TA-03-15, LA-TA-50-17, LA-TA-55-05, LA-TA-55-60, LAMHD03  |

| <b>TWBIR, Revision 2 Waste Streams</b>      | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b>   |
|---|---------------------------------|---|
| LA-W004 is LA-M004 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-03-10   |
| LA-W004 is LA-M004 (This is LANL Local ID.) | LA-TA-03-12                     | LA-TA-03-12   |
| LA-W004 is LA-M004 (This is LANL Local ID.) | LA-TA-03-13                     | LA-TA-03-13   |
| LA-W004 is LA-M004 (This is LANL Local ID.) | LA-TA-03-19                     | Not reported in 2006  |
| LA-W004 is LA-M004 (This is LANL Local ID.) | LA-TA-03-20                     | Not reported in 2006  |
| LA-W004 is LA-M004 (This is LANL Local ID.) | LA-TA-21-06                     | LA-TA-21-06   |
| LA-W004 is LA-M004 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-55-02   |
| LA-W004 is LA-M004 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-55-10   |
| LA-W004 is LA-M004 (This is LANL Local ID.) | LA-TA-55-19                     | LA-TA-55-19   |
| LA-W004 is LA-M004 (This is LANL Local ID.) | LA-TA-55-20                     | LA-TA-55-20   |
| LA-W004 is LA-M004 (This is LANL Local ID.) | LA-TA-55-30                     | LA-TA-55-30   |
| LA-W004 is LA-M004 (This is LANL Local ID.) | LA-TA-55-44                     | LA-TA-55-44   |
| LA-W004 is LA-M004 (This is LANL Local ID.) | LA-TA-55-56                     | LA-TA-55-56   |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-00-02                     | LA-TA-00-02   |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-00-04                     | LA-TA-00-01   |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-00-06                     | LA-TA-03-13, LA-TA-03-14, LA-TA-55-01, LA-TA-55-03, LA-TA-55-04, LA-TA-55-05, LA-TA-55-07, LA-TA-55-08, LA-TA-55-09, LA-TA-55-12, LA-TA-55-17B, LA-TA-55-25, LA-TA-55-50, LANHD02238, LAMHD01 |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-00-07                     | LA-TA-03-12, LA-TA-03-13, LA-TA-03-14, LA-TA-03-15, LA-TA-50-17, LA-TA-55-05, LA-TA-55-60, LAMHD03  |
| LA-W005 is LA-M005 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-03-04   |
| LA-W005 is LA-M005 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-03-06   |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-03-13                     | Not reported in 2006  |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-03-19                     | Not reported in 2006  |

| <b>TWBIR, Revision 2 Waste Streams</b>      | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b> |
|---|---------------------------------|---------------------------|
| Local ID.)                                  |                                 |                           |
| LA-W005 is LA-M005 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-03-21               |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-03-24                     | Not reported in 2006      |
| LA-W005 is LA-M005 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-55-06               |
| LA-W005 is LA-M005 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-55-10               |
| LA-W005 is LA-M005 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-55-15               |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-55-19                     | LA-TA-55-19               |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-55-21                     | LA-TA-55-21               |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-55-22                     | LA-TA-55-22               |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-55-23                     | LA-TA-55-23               |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-55-28                     | LA-TA-55-28               |
| LA-W005 is LA-M005 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-55-29               |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-55-30                     | LA-TA-55-30               |
| LA-W005 is LA-M005 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-55-31               |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-55-32                     | Not reported in 2006      |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-55-34                     | Not reported in 2006      |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-55-38                     | Not reported in 2006      |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-55-39                     | LA-TA-55-39               |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-55-43                     | Not reported in 2006      |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-55-44                     | LA-TA-55-44               |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-55-53                     | LA-TA-55-53               |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-55-56                     | Not reported in 2006      |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-55-60                     | Not reported in 2006      |
| LA-W005 is LA-M005 (This is LANL Local ID.) | LA-TA-55-61                     | LA-TA-55-61               |
| LA-W006 is LA-M006                          | LA-TA-00-05                     | LA-TA-03-12, LA-TA-55-19, |

| <b>TWBIR, Revision 2 Waste Streams</b>      | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b>  |
|---|---------------------------------|--|
|   |                                 | LA-TA-55-01, LA-TA-21-06, LA-TA-21-12, LA-TA-21-07, LA-TA-55-30, LA-TA-21-13, LA-TA-21-15, LA-TA-21-16, LA-TA-21-17          |
| LA-W006 is LA-M006                          | Not reported in 2004            | LA-TA-03-28  |
| LA-W006 is LA-M006                          | LA-TA-03-30                     | Not reported in 2006   |
| LA-W006 is LA-M006                          | LA-TA-21-16                     | LA-TA-21-16  |
| LA-W006 is LA-M006                          | LA-TA-50-19                     | LA-TA-50-19  |
| LA-W006 is LA-M006                          | LA-TA-55-30                     | Not reported in 2006   |
| LA-W006 is LA-M006                          | LA-TA-55-32                     | Not reported in 2006   |
| LA-W006 is LA-M006                          | Not reported in 2004            | LA-TA-55-35  |
| LA-W006 is LA-M006                          | LA-TA-55-38                     | LA-TA-55-38  |
| LA-W006 is LA-M006                          | LA-TA-55-41                     | LA-TA-55-41  |
| LA-W006 is LA-M006                          | LA-TA-55-44                     | LA-TA-55-44  |
| LA-W006 is LA-M006                          | LA-TA-55-49                     | LA-TA-55-14, LA-TA-55-15, LA-TA-55-19, LA-TA-55-23, LA-TA-55-30, LA-TA-55-32, LA-TA-55-36, LA-TA-55-38, LA-TA-55-39, LAMHD01 |
| LA-W006 is LA-M006                          | LA-TA-55-53                     | Not reported in 2006   |
| LA-W006 is LA-M006                          | LA-TA-03-31                     | LA-TA-03-31  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-IT-00-01                     | LA-TA-00-01  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-00-01                     | LA-TA-00-01  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-00-02                     | LA-TA-00-02  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-00-03                     | LA-TA-00-01  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-00-04                     | LA-TA-00-01  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-03-10  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-03-12  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-03-13                     | Not reported in 2006   |
| LA-W009 is LA-M009 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-03-14  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-03-19                     | LA-TA-03-19  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-03-20  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-03-23  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-03-28                     | LA-TA-03-28  |

| <b>TWBIR, Revision 2 Waste Streams</b>      | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b>  |
|---|---------------------------------|--|
| Local ID.)                                  |                                 |  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-03-40                     | LA-TA-03-40  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-21-16                     | LA-TA-21-16  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-21-18  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-21-40                     | LA-TA-21-40  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-50-11  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-50-15                     | LA-TA-50-15  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-50-17                     | LA-TA-50-17  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-50-18                     | LA-TA-50-18  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-50-19                     | LA-TA-50-19  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-50-40                     | LA-TA-50-40  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-55-19                     | LA-TA-55-19  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-55-21  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-55-30                     | LA-TA-55-30  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-55-31  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-55-38                     | LA-TA-55-38  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-55-44                     | LA-TA-55-44  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-55-49                     | LA-TA-55-14, LA-TA-55-15, LA-TA-55-19, LA-TA-55-23, LA-TA-55-30, LA-TA-55-32, LA-TA-55-36, LA-TA-55-38, LA-TA-55-39, LAMHD01 |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-55-53                     | Not reported in 2006   |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-55-56                     | Not reported in 2006   |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-55-60                     | LA-TA-55-60  |
| LA-W009 is LA-M009 (This is LANL Local ID.) | LA-TA-55-61                     | LA-TA-55-61  |
| LA-W066 is LA-M001 (This is LANL Local ID.) | LA-TA-00-01                     | LA-TA-00-01  |

| <b>TWBIR, Revision 2 Waste Streams</b>      | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b>   |
|---|---------------------------------|---|
| LA-W066 is LA-M001 (This is LANL Local ID.) | LA-TA-00-02                     | LA-TA-00-02   |
| LA-W066 is LA-M001 (This is LANL Local ID.) | LA-TA-00-04                     | LA-TA-00-01   |
| LA-W066 is LA-M001 (This is LANL Local ID.) | LA-TA-00-05                     | LA-TA-03-12, LA-TA-55-19, LA-TA-55-01, LA-TA-21-06, LA-TA-21-12, LA-TA-21-07, LA-TA-55-30, LA-TA-21-13, LA-TA-21-15, LA-TA-21-16, LA-TA-21-17 |
| LA-W066 is LA-M001 (This is LANL Local ID.) | LA-TA-03-12                     | Not reported in 2006  |
| LA-W066 is LA-M001 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-03-14   |
| LA-W066 is LA-M001 (This is LANL Local ID.) | LA-TA-03-19                     | Not reported in 2006  |
| LA-W066 is LA-M001 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-03-21   |
| LA-W066 is LA-M001 (This is LANL Local ID.) | LA-TA-03-24                     | Not reported in 2006  |
| LA-W066 is LA-M001 (This is LANL Local ID.) | LA-TA-03-40                     | Not reported in 2006  |
| LA-W066 is LA-M001 (This is LANL Local ID.) | LA-TA-21-12                     | Not reported in 2006  |
| LA-W066 is LA-M001 (This is LANL Local ID.) | LA-TA-21-40                     | Not reported in 2006  |
| LA-W066 is LA-M001 (This is LANL Local ID.) | LA-TA-21-42                     | Not reported in 2006  |
| LA-W066 is LA-M001 (This is LANL Local ID.) | LA-TA-49-01                     | LA-TA-00-01   |
| LA-W066 is LA-M001 (This is LANL Local ID.) | LA-TA-50-11                     | Not reported in 2006  |
| LA-W066 is LA-M001 (This is LANL Local ID.) | Not reported in 2004            | LA-TA-50-12   |
| LA-W066 is LA-M001 (This is LANL Local ID.) | LA-TA-50-15                     | Not reported in 2006  |
| LA-W066 is LA-M001 (This is LANL Local ID.) | LA-TA-50-40                     | Not reported in 2006  |
| LA-W066 is LA-M001 (This is LANL Local ID.) | LA-TA-55-19                     | Not reported in 2006  |
| LA-W066 is LA-M001 (This is LANL Local ID.) | LA-TA-55-30                     | LA-TA-55-30   |
| LA-W066 is LA-M001 (This is LANL Local ID.) | LA-TA-55-44                     | LA-TA-55-44   |
| LA-W067 is LA-T004 (This is LANL Local ID.) | See LANL LA-T004                | LA-TA-00-01   |
| LA-W068 is LA-T005 (This is LANL Local ID.) | See LANL LA-T005                | LA-TA-00-01   |

| <b>TWBIR, Revision 2 Waste Streams</b>      | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b> |
|---|---------------------------------|---------------------------|
| LA-WR01 is LA-MR01 (This is LANL Local ID.) | LA-TA-00-01, LA-TA-03-27        | Not reported in 2006      |
| LA-WR05 is LA-MR05 (This is LANL Local ID.) | LA-TA-03-27                     | LA-TA-03-27               |
| N/A   | LA-TA-55-52                     | LA-TA-55-52               |
| LA-Z001                                     | Not reported in 2004            | Not reported in 2006      |

### F-2.13 Nevada Test Site (NTS)

Table F-14 contains the crosswalk of waste streams beginning with the TWBIR, Revision 2, crosswalked to the TWBIR-2004 waste streams, and then crosswalked to the 2006 waste streams for the Nevada Test Site (NTS).

**Table F-14. Nevada Test Site Laboratory Waste Streams Crosswalk**

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b> |
|--|---------------------------------|---------------------------|
| NT-W001                                | NT-W001                         | NT-W001                   |
| NT-W021                                | NT-W021                         | NT-W021                   |
| N/A                                    | NT-JAS-01                       | NT-JAS-01                 |

### F-2.14 Oak Ridge National Laboratory (ORNL)

Table F-15 contains the crosswalk of waste streams beginning with the TWBIR, Revision 2, crosswalked to the TWBIR-2004 waste streams, and then crosswalked to the 2006 waste streams for Oak Ridge National Laboratory (ORNL).

**Table F-15. Oak Ridge National Laboratory Waste Streams Crosswalk**

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b> |
|--|---------------------------------|---------------------------|
| OR-W041, OR-W052, OR-W053              | OR-W201                         | OR-W201                   |
| OR-W044, OR-W045, OR-W047, OR-W048     | OR-W202                         | OR-W202                   |
| N/A                                    | OR-W203                         | OR-W203                   |
| N/A                                    | OR-W204                         | OR-W204                   |
| N/A                                    | N/A                             | OR-W205                   |
| OR-W054                                | OR-W211                         | OR-W211                   |
| OR-W040, OR-W043                       | OR-W212                         | OR-W212                   |
| N/A                                    | OR-W213                         | OR-W213                   |
| N/A                                    | OR-W214                         | OR-W214                   |
| OR-W042, OR-W046                       | OR-W215                         | OR-W215                   |
| OR-W051                                | N/A                             | N/A                       |
| OR-W049                                | N/A                             | N/A                       |
| OR-W050                                | N/A                             | N/A                       |



| TWBIR, Revision 2 Waste Streams | TWBIR-2004 Waste Streams | 2006 Waste Streams |
|---------------------------------|--------------------------|--------------------|
| OR-Z001                         | Unavailable              | Unavailable        |

### F-2.15 Paducah Gaseous Diffusion Plant (PA)

Table F-16 contains the crosswalk of waste streams beginning with the TWBIR, Revision 2, crosswalked to the TWBIR-2004 waste streams, and then crosswalked to the 2006 waste streams for Paducah.

**Table F-16. Paducah Gaseous Diffusion Plant Laboratory Waste Stream Crosswalk**

| TWBIR, Revision 2 Waste Streams | TWBIR-2004 Waste Streams | 2006 Waste Streams |
|---------------------------------|--------------------------|--------------------|
| PA-A015                         | PA-A015                  | PA-A015            |
| PA-B015                         | PA-B015                  | PA-B015            |
| PA-W014                         | PA-W014                  | PA-W014            |

### F-2.16 Sandia National Laboratories (SA)

Table F-17 contains the crosswalk of waste streams beginning with the TWBIR, Revision 2, crosswalked to the TWBIR-2004 waste streams, and then crosswalked to the 2006 waste streams for Sandia National Laboratories (SNL).

**Table F-17. Sandia National Laboratories Waste Streams Crosswalk**

| TWBIR, Revision 2 Waste Streams | TWBIR-2004 Waste Streams | 2006 Waste Streams |
|---------------------------------|--------------------------|--------------------|
| SA-T001                         | SA-T001                  | SA-T001            |
| SA-W134                         | SA-W134,                 | SA-W134            |
| SA-W134                         | SA-W134M                 | SA-W134M           |
| SA-W134                         | SA-W135                  | SA-W135            |
| N/A                             | N/A                      | SA-W136            |
| SA-Z001                         | SA-Z001                  | Unavailable        |

### F-2.17 Savannah River Site (SR)

Table F-18 contains the crosswalk of waste streams beginning with the TWBIR, Revision 2, crosswalked to the TWBIR-2004 waste streams, and then crosswalked to the 2006 waste streams for the Savannah River Site (SRS).

**Table F-18. Savannah River Site Waste Streams Crosswalk**

| <b>TWBIR, Revision 2 Waste Streams</b>  | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b>   |
|---|---------------------------------|---|
| T001-221F-MET, T001-221F-VIT, T001-221F-HET   | T001-221F-HET                   | SR-W026-221F-HET  |
| T001-221H-MET, T001-221H-VIT, T001-221H-HET   | T001-221H-HET                   | SR-T001-221H-HEPA   |
| T001-235F-MET, T001-235F-VIT, T001-235F-HET   | T001-235F-HET                   | SR-W027-235F-HET  |
| T001-772F-MET, T001-772F-VIT, T001-772F-HET   | T001-772F-HET                   | SR-W026-772F-HET  |
| T001-773A-MET, T001-773A-VIT, T001-773A-HET   | T001-773A-HET                   | SR-W027-773A-HET  |
| T001-773A-CLA   | T001-773A-CLAS                  | SR-T001-773A-CLAS   |
| T003-773A-VIT, T003-773A-HET  | T003-773A-HET                   | SR-T003-773A-HET  |
| W006-773A-VIT   | W006-773A-VIT                   | SR-W027-773A-HET  |
| W026-221F-VIT, W026-221F-HET  | W026-221F-HET                   | SR-W026-221F-HET  |
| W026-221H-VIT, W026-221H-HE   | W026-221H-HET                   | SR-W027-221H-HET-A,<br>SR-W027-221H-HET-B   |
| W026-235F-VIT, W026-235F-HET  | W026-235F-HET                   | SR-W027-235F-HET  |
| W026-772F-VIT, W026-772F-HET  | W026-772F-HET                   | SR-W026-772F-HET  |
| W026-773A-VIT, W026-773A-HE   | W026-773A-HET                   | SR-W027-773A-HET  |
| W027-221F-ME, W027-221F-VIT, W027-221F-HET  | W027-221F-HET                   | SR-W027-221F-HET  |
| W027-221H-ME, W027-221H-VIT, W027-221H-HE   | W027-221H-HET                   | SR-W027-221H-HET-A,<br>SR-W027-221H-HET-B   |
| W027-235F-ME W027-235F-VIT, W027-235F-HET   | W027-235F-HET                   | SR-W0235F-HET   |
| W027-772F-ME, W027-772F-VIT, W027-772F-HET  | W027-772F-HET                   | SR-W026-772F-HET  |
| W027-773A-ME, W027-773A-VIT, W027-773A-HE   | W027-773A-HET                   | SR-W027-773A-HET  |
| W027-999-VIT, W027-999-HET, MD-M001, MD-T001, MD-T003, MD-T005, MD-T006, MD-T007, MD-T008, MD-T009, MD-T010, MD-T012, MD-W002, MD-W003, MD-W017 | W027-999-HET                    | SR-W027-999-AGNS-HET<br>SR-W027-999-AGNS-HOM<br>SR-W027-999-LASL-HET<br>SR-W027-999-LASL-HOM<br>SR-W027-999-MD-HET<br>SR-W027-999-MD-HOM-A<br>SR-W027-999-MD-HOM-B<br>SR-W027-999-MD-HOM-C<br>SR-W027-999-MD-SOIL<br>SR-W027-SRSG-HET<br>SR-W027-SRSG-HET-RH<br>SR-W027-SRSG-HOMO |

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b> |
|--|---------------------------------|---------------------------|
|  |                                 | SR-W027-SRSG-SOIL         |
| W027-221H-HET                          | W027-221H-HET                   | SR-W027-221H-HEPA         |
| W026-235F-VIT                          | W026-235F-HET                   | SR-W027-235-HOMO          |
| W026-221F-HET                          | W026-221F-HET                   | SR-W026-221F-HOMO         |
| T001-221F-HET                          | T001-221F-HET                   | SR-W026-221F-HEPA         |
| T003-773A-VIT                          | T003-773A-HET                   | SR-T003-773A-HET          |
| W027-221H-VIT                          | W027-221H-HET                   | SR-W027-HBL-BOX-A         |
| W027-221H-VIT                          | W027-221H-HET                   | SR-W027-HBL-BOX-B         |
| W053-773A-VIT                          | W053-773A-VIT                   | SR-W027-773A-HET          |
| Not at SRS                             | Not at SRS                      | SR-BCLRH-MT01             |
| Not at SRS                             | Not at SRS                      | SR-BCLRH-T001             |
| Not at SRS                             | Not at SRS                      | SR-BCLRH-T002             |
| Not at SRS                             | Not at SRS                      | SR-BCLRH-T003             |
| Not at SRS                             | Not at SRS                      | SR-BCLRH-T004             |
| Not at SRS                             | Not at SRS                      | SR-BCLRH-T005             |
| Not at SRS                             | Not at SRS                      | SR-BCLRH-T006             |
| Not at SRS                             | Not at SRS                      | SR-BCLRH-T007             |
| Not at SRS                             | Not at SRS                      | SR-BCLRH-T008             |
| Not at SRS                             | Not at SRS                      | SR-BCLRH-T009             |
| Not at SRS                             | Not at SRS                      | SR-BCLRH-T010             |
| Not at SRS                             | Not at SRS                      | SR-BCLRH-T011             |
| N/A                                    | SR-T001-WSB-1                   | SR-T001-WSB-1             |
| N/A                                    | SR-W026-WSB-2                   | SR-W026-WSB-2             |
| N/A                                    | SR-T001-WSB-3                   | SR-T001-WSB-3             |
| N/A                                    | SR-W026-PDCF-1                  | SR-W026-PDCF-1            |
| N/A                                    | SR-W026-MFFF-1                  | SR-W026-MFFF-1            |
| SR-Z001                                | SR-Z001                         | SR-Z001                   |

### **F-2.18 Separations Process Research Unit (SPRU)**

Table F-19 contains the crosswalk of waste streams beginning with the TWBIR, Revision 2, crosswalked to the TWBIR-2004 waste streams, and then crosswalked to the 2006 waste streams for the Separations Process Research Unit (SPRU).

**Table F-19. Separations Process Research Unit Waste Streams Crosswalk**

| <b>TWBIR, Revision 2 Waste Streams</b> | <b>TWBIR-2004 Waste Streams</b> | <b>2006 Waste Streams</b> |
|--|---------------------------------|---------------------------|
| N/A                                    | SP-T001                         | SP-T001                   |

**F-2.19 U.S. Army Material Command (MC)**

Table F-20 contains the crosswalk of waste streams beginning with the TWBIR, Revision 2, crosswalked to the TWBIR-2004 waste streams, and then crosswalked to the 2006 waste streams for the U.S. Army Material Command (USAMC).

**Table F-20. U.S. Army Material Command Waste Streams Crosswalk**

| TWBIR, Revision 2 Waste Streams | TWBIR-2004 Waste Streams | 2006 Waste Streams |
|---------------------------------|--------------------------|--------------------|
| MC-W001                         | MC-W001                  | N/A                |
| N/A                             | N/A                      | MC-W002            |

**F-2.20 West Valley Demonstration Project (WV)**

Table F-21 contains the crosswalk of waste streams beginning with the TWBIR, Revision 2, crosswalked to the TWBIR-2004 waste streams, and then crosswalked to the 2006 waste streams for the West Valley Demonstration Project (WVDP).

**Table F-21. West Valley Demonstration Project Waste Streams Crosswalk**

| TWBIR, Rev. 2 Waste Streams | TWBIR-2004 Waste Streams  | 2006 Waste Streams        |
|-----------------------------|---------------------------|---------------------------|
| WV-M005                     | WV-M005, WV-T019          | WV-M005                   |
| WV-M007                     | WV-M007                   | WV-M007                   |
| WV-M008                     | WV-M008                   | WV-M008                   |
| WV-M010                     | WV-M010                   | WV-M010                   |
| WV-M012                     | N/A                       | N/A                       |
| WV-M013                     | WV-M013                   | WV-M013                   |
| WV-M015                     | WV-M015                   | WV-M015                   |
| WV-T001                     | WV-T001, WV-T020, WV-T021 | WV-T001, WV-T020, WV-T021 |
| WV-T002                     | N/A                       | N/A                       |
| WV-T003                     | N/A                       | N/A                       |
| WV-T004                     | WV-T004                   | WV-T004                   |
| WV-T006                     | WV-T006                   | WV-T006                   |
| WV-T009                     | WV-T009                   | WV-T009                   |
| WV-T011                     | WV-T011                   | WV-T011                   |
| WV-T014                     | WV-T014                   | WV-T014                   |
| WV-T014                     | WV-T018                   | WV-T018a, WV-T018b        |
| WV-T016                     | WV-T016,                  | WV-T016                   |
| WV-T016                     | WV-T018                   | WV-T018a, WV-T018b        |
| WV-T017                     | WV-T017                   | WV-T017                   |
| WV-W041                     | N/A                       | N/A                       |
| WV-W024                     | WV-W024                   | WV-W024                   |
| WV-Z001                     | WV-Z001                   | WV-Z001                   |