ANNUAL TRANSURANIC WASTE INVENTORY REPORT – 2012
(Data Cutoff Date 12/31/2011)

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ACRONYMS AND ABBREVIATIONS

For a list of Site Identifiers, refer to Figure 1-1.

AK	Acceptable knowledge
ANL	Argonne National Laboratory (formerly known as Argonne National Laboratory – East)
ATWIR	Annual Transuranic Waste Inventory Report
BAPL	Bettis Atomic Power Laboratory
CBFO	Carlsbad Field Office
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CH	Contact-handled
Ci	Curie
CID	Comprehensive Inventory Database
CIT	CID Import Template
CPR	Cellulose, plastic, and rubber
CY	Calendar year
D&D	Decontamination and decommissioning
DOE	U.S. Department of Energy
DT	Data template
EDTA	Ethylenediaminetetraacetic acid
EPA	U.S. Environmental Protection Agency
INL	Idaho National Laboratory
KAPL-NFS	Knolls Atomic Power Laboratory – Nuclear Fuel Services
KAPL-S	Knolls Atomic Power Laboratory– Schenectady
kg	Kilograms
LANL	Los Alamos National Laboratory
LANL-CO	Los Alamos National Laboratory – Carlsbad Operations
LBNL	Lawrence Berkeley National Laboratory
l	Liter
LLNL	Lawrence Livermore National Laboratory
LLW	Low-level waste
LQS	Large quantity site
LWA	Land Withdrawal Act
m^3	Cubic meters

MFC	Materials and Fuels Complex (formerly known as Argonne National Laboratory – West)
MgO	Magnesium oxide
MLLW	Mixed low-level waste
mrem	Millirem
NEPA	National Environmental Policy Act
NNSS	Nevada National Security Site (formerly Nevada Test Site)
NRD	Nuclear Radiation Development Site
NTP	National TRU Program
ORIGEN-S	Oak Ridge Isotope Generation and Depletion Code (a module of SCALE version 6)
ORNL	Oak Ridge National Laboratory
OSRP	Off-Site Source Recovery Program
PA	Performance assessment
PAIR	Performance Assessment Inventory Report
PDCF	Pit Disassembly and Conversion Facility
PM	Packaging material
QA	Quality assurance
QAPD	Quality Assurance Program Document
RCRA	Resource Conservation and Recovery Act
RFETS	Rocky Flats Environmental Technology Site
RH	Remote-handled
RL	Hanford Site –Richland Operations
ROD	Record of Decision
RP	Hanford Site – Office of River Protection
SCALE	Standardized Computer Analysis for Licensing Evaluation
SNL	Sandia National Laboratories
SQS	Small quantity site
SRS	Savannah River Site
TDOP	Ten-drum overpack
TRU	Transuranic
TWBIR	Transuranic Waste Baseline Inventory Report
WAC	Waste Acceptance Criteria
WAP	Waste Analysis Plan
WDS	Waste Data System
WIPP	Waste Isolation Pilot Plant
WMP	Waste material parameter
WPR	Waste profile report
WV	West Valley Demonstration Project

EXECUTIVE SUMMARY

The U.S. Department of Energy's (DOE's) Waste Isolation Pilot Plant (WIPP) began accepting defense-related transuranic (TRU) waste on March 26, 1999, becoming the nation's first and only deep geologic repository for the permanent disposal of defense-generated TRU waste. As of December 31, 2011 (the cutoff date for inventory data for this report), there have been 10,244 shipments (9,708 contact-handled [CH] and 536 remote-handled [RH]) of TRU waste to WIPP for emplacement since WIPP's opening (DOE 2012).

This *Annual Transuranic Waste Inventory Report – 2012* (ATWIR-2012) (hereafter referred to as "this report" or "ATWIR-2012") reflects the changes that have occurred and provides an update to the defense-related TRU waste inventory data since the last published report, the *Annual Transuranic Waste Inventory Report – 2011* (ATWIR-2011) (DOE 2011). This report focuses on the TRU waste remaining at the TRU waste sites and only presents emplaced waste in section 3.0 in Table 3-3, Table 3-5, and Table 3-13. Changes in waste volume, waste material parameters (WMPs), packaging materials (PMs), complexing agents, oxyanions, and radionuclides are also discussed in section 3.0 (see section 6.0 for definitions of these components).

The ATWIR-2012 was developed from an annual inventory data update campaign involving the TRU waste sites. TRU waste generation has occurred at both large quantity and small quantity sites (LQSs and SQSs) across the country. Many of these sites have emplaced their waste at WIPP, found other compliant disposition pathways for the waste, or transferred the waste to other sites for further disposition.

The updated data received from the TRU waste sites were entered into the Comprehensive Inventory Database (CID). The CID is a DOE Carlsbad Field Office (CBFO) database qualified in accordance with the Los Alamos National Laboratory – Carlsbad Operations (LANL-CO) Quality Assurance (QA) Program, which is in compliance with the CBFO *Quality Assurance Program Document* (QAPD) (DOE 2010). The CID includes estimates for: TRU waste volumes, WMPs, PMs, complexing agents, oxyanions, and radionuclides (decayed to common years 2011 and 2033 [WIPP proposed closure date]).

The purpose of this report is to document the total inventory of TRU waste as defined by the TRU waste sites to provide current TRU waste inventory information for the DOE complex, WIPP stakeholders, and regulators, and to provide the CBFO with updated strategic inventory information. The TRU waste inventory also supports CBFO input into National Environmental Policy Act (NEPA) analyses, the development of new containers or shipping packages, and planned change requests for containers and other design changes that may take place in the repository.

TRU waste must meet the WIPP requirements (e.g., WIPP Waste Acceptance Criteria [WAC] and the WIPP Hazardous Waste Facility Permit Waste Analysis Plan [WAP]) before it can be disposed of at WIPP, regardless of its designation in this inventory report.

The following tables summarize the TRU waste anticipated (stored plus projected) inventory volume; WMP and PM masses; complexing agent and oxyanion masses; radionuclide activity, and inventory change estimates as of December 31, 2011. All site data are validated by the DOE TRU waste site representative to ensure the data best represent the site's inventory at the time of the data cutoff.

Table ES-1. Anticipated CH/RH Waste Inventory Volume by Site

TRU Waste Site	CH Volumes (m^3)	RH Volumes (m^3)	Total Volumes (m^3)
Hanford (Richland) Site	2.01E+04	2.44E+03	2.25E+04
Idaho National Laboratory	2.83E+04	2.30E+02	2.85E+04
Los Alamos National Laboratory	9.88E+03	7.92E+01	9.96E+03
Oak Ridge National Laboratory	9.45E+02	6.13E+02	1.56E+03
Savannah River Site	7.35E+03	4.09E+01	7.39E+03
Small Quantity Sites	1.44E+03	1.63E+02	1.60E+03
Grand Total	**6.80E+04**	**3.57E+03**	**7.15E+04**

Data Source: CID Data Version D.11.00 (LANL-CO 2012). Note: This table contains data for WIPP-bound waste streams only; it does not include data for emplaced or potential waste streams.

Table ES-2. Anticipated CH/RH Waste and Packaging Material Inventory

Waste Material	CH Mass (kg)	RH Mass (kg)	Total Mass (kg)
Iron-based Metal/Alloys	2.70E+06	6.70E+05	3.37E+06
Aluminum-based Metal/Alloys	2.08E+05	1.42E+04	2.23E+05
Other Metal/Alloys	2.54E+05	3.71E+05	6.26E+05
Other Inorganic Materials	2.31E+06	8.84E+05	3.19E+06
Cellulose	9.20E+05	9.19E+04	1.01E+06
Rubber	4.29E+05	6.89E+04	4.98E+05
Plastic	1.53E+06	1.83E+05	1.71E+06
Cement	2.48E+06	3.60E+05	2.84E+06
Solidified Inorganic Material	3.49E+06	1.71E+04	3.51E+06
Solidified Organic Material	1.61E+06	1.85E+03	1.61E+06
Soils	2.41E+06	1.39E+05	2.55E+06
Vitrified	--	--	--
Packaging Material, Cellulose	2.85E+04	--	2.85E+04
Packaging Material, Plastic	9.04E+05	1.49E+05	1.05E+06
Packaging Material, Rubber	2.62E+04	2.05E+03	2.82E+04
Packaging Material, Steel	1.13E+07	3.39E+06	1.47E+07

Table ES-2. Anticipated CH/RH Waste and Packaging Material Inventory
Continued

Waste Material	CH Mass (kg)	RH Mass (kg)	Total Mass (kg)
Packaging Material, Lead	--	8.44E+02	8.44E+02
Grand Total	**3.06E+07**	**6.34E+06**	**3.69E+07**

Data Source: CID Data Version D.11.00 (LANL-CO 2012). Note: This table contains data for WIPP-bound waste streams only; it does not include data for emplaced or potential waste streams.

Table ES-3. Anticipated CH/RH Complexing Agent and Oxyanion Inventory

Site	Complexing Agent Mass (kg)	Oxyanion Mass (kg)
Hanford (Richland) Site	1.38E+04	2.59E+05
Idaho National Laboratory	3.19E+03	4.02E+05
Los Alamos National Laboratory	2.53E+03	4.05E+05
Small Quantity Sites	5.59E+01	2.28E+01
Grand Total	**1.95E+04**	**1.07E+06**

Data Source: CID Data Version D.11.00 (LANL-CO 2012). Note: This table contains data for WIPP-bound waste streams only; it does not include data for emplaced or potential waste streams.

Table ES-4. Anticipated CH/RH Radionuclide Activity by Site Decayed through 2011

TRU Waste Site	CH Activity (Ci)	RH Activity (Ci)	Total Activity (Ci)
Hanford (Richland) Site	7.36E+05	7.75E+05	1.51E+06
Idaho National Laboratory	6.94E+04	1.37E+05	2.06E+05
Los Alamos National Laboratory	3.81E+05	2.95E+03	3.84E+05
Oak Ridge National Laboratory	9.10E+04	8.43E+03	9.94E+04
Savannah River Site	1.56E+05	5.19E+03	1.61E+05
Small Quantity Sites	2.45E+04	2.24E+05	2.48E+05
Grand Total	**1.46E+06**	**1.15E+06**	**2.61E+06**

Data Source: CID Data Version D.11.00 (LANL-CO 2012). Note: This table contains data for WIPP-bound waste streams only; it does not include data for emplaced or potential waste streams.

Table ES-5. Anticipated CH/RH Inventory Changes

Inventory Parameter	ATWIR-2011	ATWIR-2012	Total Net Change
Volume (m^3)	8.00E+04	7.15E+04	-8.50E+03
Waste & Packaging Material (kg)	4.10E+07	3.69E+07	-4.06E+06
Complexing Agents (kg)	2.17E+04	1.95E+04	-2.14E+03
Oxyanions (kg)	1.18E+06	1.07E+06	-1.14E+05
Radionuclide Activity (Ci as of 2033)	1.80E+06	1.55E+06	-2.46E+05

Data Source: CID Data Versions D.10.01 (LANL-CO 2011e) and D.11.00 (LANL-CO 2012).
Note: This table contains data for WIPP-bound waste streams only; it does not include data for emplaced or potential waste streams.

1.0 INTRODUCTION

This *Annual Transuranic Waste Inventory Report – 2012* (ATWIR-2012) (hereafter referred to as "this report" or "ATWIR-2012") provides the National TRU Program (NTP) with a strategic inventory to be used for initiatives such as the development of transuranic (TRU) waste site-specific project plans or National Environmental Policy Act (NEPA) analyses. Also, if requested by the U.S. Department of Energy (DOE) Carlsbad Field Office (CBFO), this report will provide the basis for the Performance Assessment Inventory Report (PAIR) for performance assessment (PA) modeling purposes. This report includes the background and history of the TRU waste inventory, the information sources used to collect and prepare the inventory, descriptions of the ways inventory information is used, methodology used to develop the inventory, TRU waste inventory estimates, and changes since the *Annual Transuranic Waste Inventory Report – 2011* (ATWIR-2011) (DOE 2011).

TRU waste must meet the requirements of the Waste Isolation Pilot Plant (WIPP) Waste Acceptance Criteria (WAC) and the WIPP Hazardous Waste Facility Permit Waste Analysis Plan (WAP) before it can be disposed of at WIPP.

Section 1.1, Background and History, explains how the TRU waste inventory was collected and used for the initial certification of WIPP. Currently, the inventory is collected on an annual basis to monitor how it is changing. Section 1.2, Sources of Transuranic Waste Inventory Information, includes a description of all information sources used to update the Comprehensive Inventory Database (CID). Examples of sources include acceptable knowledge (AK) reports, TRU waste site information, and the WIPP's Waste Data System (WDS). Section 1.3, Uses of Transuranic Waste Inventory Information, includes uses of TRU waste inventory.

Section 2.0, Methodology, describes the methodologies undertaken in order to prepare this report. These include:

- Collection, screening, and analyses of raw inventory data from the TRU waste sites
- Analysis of emplaced inventory data reported from the WDS
- Verification and validation of data entered into the CID
- Decay and buildup correction of radionuclide data using the Oak Ridge Isotope Generation and Depletion (ORIGEN-S) module of SCALE [Standardized Computer Analysis for Licensing Evaluation]*: A Modular Code System for Performing Standardized Computer Analyses for Licensing Evaluation*, Version 6 (Scale 6) (ORNL 2009)
- Calculations performed within the CID

Section 3.0, Transuranic Waste Inventory Estimates and Changes, discusses the TRU waste inventory estimates, with summaries of the inventory information collected from the TRU waste sites, and discusses changes in the inventory information for each of the following sections. Section 3.1 presents rolled-up TRU waste volume estimates by site of contact-handled (CH) and remote-handled (RH) TRU waste reported as stored, projected, and anticipated. Section 3.2 presents the inventory of non-radiological material estimates including: waste material

parameters (WMPs), packaging materials (PMs), and chemical components. Section 3.3 presents the TRU waste radionuclide activity inventory from each site, rolled up and decayed through the end of calendar year (CY) 2011. All site data are validated by the DOE TRU waste site representative to ensure the data best represent the site's inventory at the time of the data cutoff.

Section 4.0 discusses the potential TRU waste streams that have been excluded in accordance with CBFO guidance criteria. These criteria are documented in a "screening memorandum" (Patterson 2010) that determines whether a waste stream is WIPP-bound or potential (see Appendix D). Also found in section 4.0 is a table showing waste streams that have been moved from potential to WIPP-bound status during this collection period.

Section 5.0 presents the conclusion of this report, section 6.0 provides the glossary, and section 7.0 provides the references that were used for this report.

This report also contains four appendices. Appendix A presents the WIPP-bound waste profile reports (WPRs), Appendix B presents the potential TRU waste WPRs, and Appendix C presents the historic crosswalk of waste streams. Note: If a waste stream is identified as a *new waste stream*, it means that the waste stream has never been reported. If a waste stream is identified as a *deleted waste stream*, the explanation for why it is deleted is provided, if available. Appendix D contains the screening memo for determining whether or not a waste stream is potential.

This report includes comprehensive data from each TRU waste site and WDS summation data for emplaced waste. More specific information on the emplaced waste can be obtained from the CBFO WDS administrator at the WIPP Information Center at 1-800-336-WIPP (9477) or at infocntr@wipp.ws**.** The WDS administrator administers the official database that contains container-level data on the emplaced TRU waste.

1.1 Background and History

The WIPP Land Withdrawal Act (LWA)[1] (U.S. Congress 1992 and 1996) required the U.S. Environmental Protection Agency (EPA) to issue final disposal regulations to certify WIPP. On May 18, 1998, the EPA certified that WIPP complied with the final disposal regulations and criteria of Title 40 Code of Federal Regulations (CFR) Parts 191 and 194 (EPA 1993; EPA 1996). DOE opened WIPP on March 26, 1999, with the initial receipt of TRU waste, thus becoming the nation's first deep geologic repository for the permanent disposal of defense-generated TRU waste. The disposal regulations require that WIPP be recertified every five years from the time of the first receipt of waste; WIPP has been recertified twice. DOE submitted the first recertification application, CRA-2004 (DOE 2004), to the EPA in March 2004, and the EPA recertified WIPP in March 2006. DOE submitted the second recertification application, CRA-2009 (DOE 2009), to the EPA in March 2009, and WIPP was recertified in November 2010. The third recertification application is due to the EPA in March 2014.

[1]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).

Table 1-1 lists the historical TRU waste inventory documents and their intended purpose.

Table 1-1. Historical Inventory Documents

Date	Title	Purpose
June 1994	WIPP Transuranic Waste Baseline Inventory Report	First attempt made by DOE complex to report all of its TRU waste at the waste-stream level.
December 1995	Transuranic Waste Baseline Inventory Report (TWBIR), Revision 2	Revisions 2 and 3 provided the inventory information to the Sandia National Laboratories-Carlsbad for the initial certification of WIPP.
June 1996	TWBIR, Revision 3	
March 2004	Appendix DATA, Attachment F of *Title 40 CFR 191, Subparts B and C, Compliance Recertification 2004*	Provided updated inventory information for the first recertification of WIPP in 2004.
March 2006	Transuranic Waste Baseline Inventory Report 2004	This was a revision of Appendix DATA, Attachment F. Provided updated inventory to support the Performance Assessment Baseline Calculation.
August 2008	Annual Transuranic Waste Inventory Report (ATWIR)–2007	The first annual inventory report that contained both scaled (calculations to represent a full repository) and unscaled data.
December 2008	ATWIR–2008	Annual inventory report that reported only unscaled data.
April 2009	Performance Assessment Inventory Report–2008	Provided data from ATWIR-2008 in the required format for performance assessment calculations.
December 2009	ATWIR–2009	Provided updated annual inventory information.
December 2010	ATWIR–2010	Provided updated annual inventory information.
December 2011	ATWIR–2011	Provided updated annual inventory information.

Depending upon programmatic needs, site waste management decisions, and characterization data, TRU waste inventory information is re-evaluated frequently and the TRU waste inventory is updated annually. This report is an update based on the TRU waste complex's known inventory as of December 31, 2011.

Since the ATWIR-2011 was published, a number of changes and improvements have occurred that affected the volume, waste material, and radiological characteristics of TRU waste streams. Also, five (5) waste streams have been moved from potential to WIPP-bound status to be in alignment with the CBFO screening memorandum (Patterson 2010) provided in Appendix D. The list of these waste streams (presented in Table 4-2) also includes the reasons for the moves. The other primary inventory changes observed and addressed in this report are attributed to the following:

- Waste emplacement since the ATWIR-2011.

- Hanford Richland Operations Office added waste as a result of the issuance of a new Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Record of Decision (ROD). (EPA, Ecology, and DOE 2011)

- A Savannah River Site project (the Pit Disassembly and Conversion Facility [PDCF]) was cancelled, thus decreasing the volume of waste.

- Twenty-one new waste streams were added to the inventory. This includes both three from potential and 18 new WIPP-bound waste streams (see Table C-1 in Appendix C).

- Intersite shipments occurred between Argonne National Laboratory and Sandia National Laboratories to Idaho National Laboratory (INL).

- The waste at the Paducah Gaseous Diffusion Plant was re-sampled and was determined not to be TRU waste.

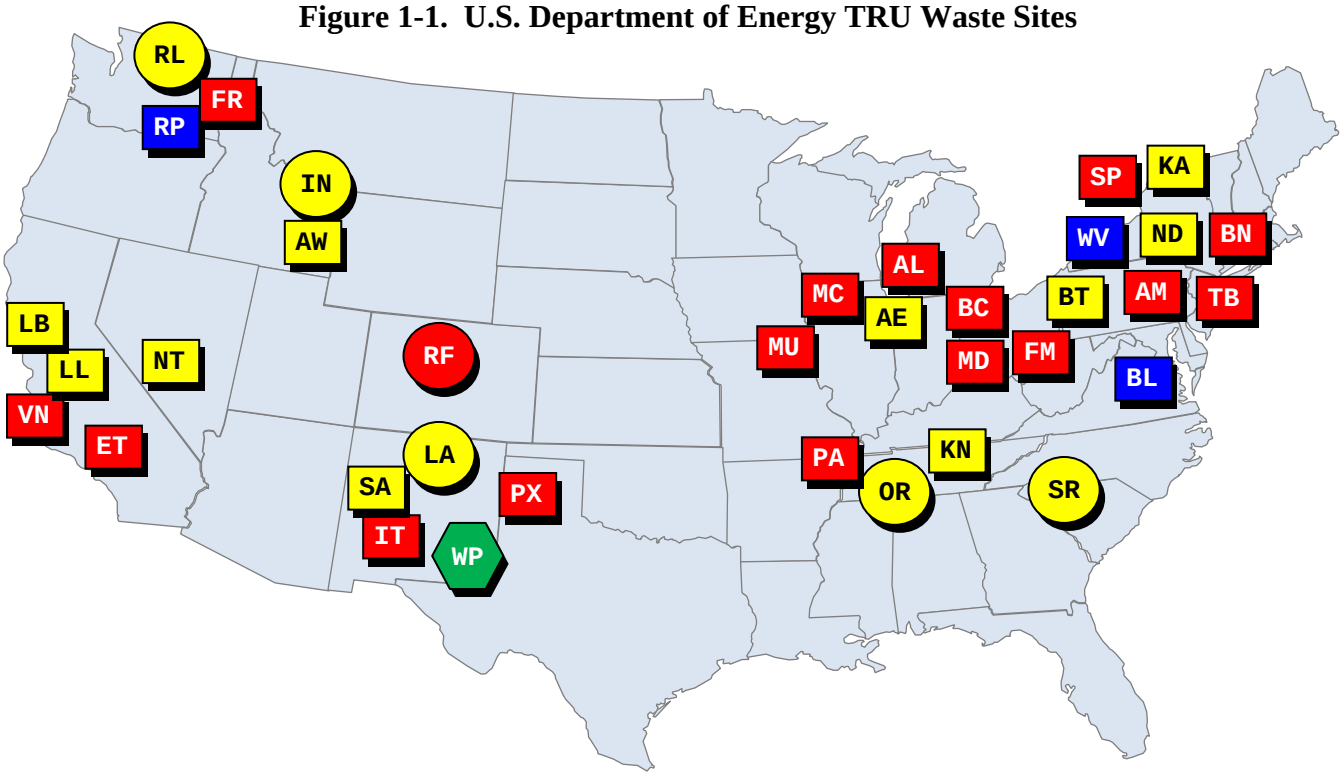
- Final disposition for the U.S. Army Materiel Command waste was provided by the Joint Munitions Command.

- One INL waste stream was declared mixed low-level waste (MLLW) and removed from the TRU waste inventory.

TRU waste generation has occurred at both small quantity sites (SQSs) and large quantity sites (LQSs) across the country, as seen in Figure 1-1. This figure represents data as of December 31, 2011. Circles identify LQSs, boxes identify SQSs, yellow indicates active sites, red indicates sites that have been de-inventoried of their legacy TRU waste, and blue indicates sites containing only potential TRU waste.

This report was prepared by the Los Alamos National Laboratory – Carlsbad Operations (LANL-CO) TRU Waste Inventory Team. The work for this report was performed under the CBFO *Quality Assurance Program Document* (QAPD) (DOE 2010). The processes used by the LANL-CO TRU Waste Inventory Team to collect, maintain, and report inventory information are graded and implemented to Nuclear Quality Assurance-1 standards under the LANL-CO Quality Assurance (QA) Program. This includes the software QA procedures used to qualify the CID and other software, including ORIGEN-S, used to analyze TRU waste inventory information. LANL-CO software QA is documented in LCO-QPD-02, *LANL-CO Software Quality Assurance Plan* (LANL-CO 2011c), and LCO-QP19-1, *Software Quality Assurance* (LANL-CO 2011d).

Figure 1-1. U.S. Department of Energy TRU Waste Sites



Yellow – Active TRU Waste Sites **Red – De-inventoried Legacy TRU Waste Sites** **Blue – Potential TRU Waste Sites**

AE	Argonne National Laboratory
AL	Ames Laboratory — de-inventoried
AM	ARCO Medical Products — de-inventoried - shipped to the Offsite Source Recovery Program (OSRP)
AW	Materials and Fuels Complex
BC	Battelle Columbus Laboratories— de-inventoried - shipped to RL and SR
BL	Babcock and Wilcox Nuclear Energy Services (Potential)
BN	Brookhaven National Laboratory— de-inventoried - shipped to OSRP
BT	Bettis Atomic Power Laboratory —de-inventoried of legacy TRU waste; has continuing mission
ET	Energy Technology Engineering Center— de-inventoried - shipped to RL
FM	Fernald Environmental Management Project— de-inventoried - shipped to OSRP
FR	Framatome— de-inventoried - shipped to RL
IN	Idaho National Laboratory
IT	Inhalation Toxicology Research Institute (Lovelace Respiratory Research Institute) — de-inventoried - shipped to SA
KA	Knolls Atomic Power Laboratory-Schenectady
KN	Knolls Atomic Power Laboratory-Nuclear Fuel Services — de-inventoried of legacy TRU waste; has continuing mission
LA	Los Alamos National Laboratory
LB	Lawrence Berkeley National Laboratory — de-inventoried of legacy TRU waste; has continuing mission
LL	Lawrence Livermore National Laboratory — de-inventoried of legacy TRU waste; has continuing mission
MC	U.S. Army Materiel Command (Army) — de-inventoried of legacy TRU waste
MD	Mound Plant – de-inventoried - shipped to SRS
MU	University of Missouri Research Reactor — de-inventoried - shipped to AE, then to WIPP
ND	Nuclear Radiation Development Site, Inc. —de-inventoried of legacy waste; has continuing mission
NT	Nevada Nuclear Security Site – de-inventoried of legacy waste; has continuing mission
OR	Oak Ridge National Laboratory
PA	Paducah Gaseous Diffusion Plant (found to be non-TRU waste)
PX	Pantex Plant—shipped to LA then to WIPP
RF	Rocky Flats Environmental Technology Site — de-inventoried - shipped to WIPP
RL	Hanford Site (Richland Operations Office)
RP	Hanford Site (Office of River Protection) (Potential)
SA	Sandia National Laboratories — de-inventoried of legacy TRU waste; has continuing mission
SP	Separations Process Research Unit (found to be low level waste)
SR	Savannah River Site
TB	Teledyne Brown Engineering — de-inventoried - shipped to RF, then to WIPP
VN	General Electric Vallecitos Nuclear Center — de-inventoried - RH shipped to WIPP, CH shipped to IN
WV	West Valley Demonstration Project (Potential)
WP	Waste Isolation Pilot Plant

1.2 Sources of Transuranic Waste Inventory Information

This report includes information taken from: 1) the ATWIR-2011, 2) updated information provided by the TRU waste sites, 3) AK reports, and 4) the WIPP WDS (DOE 2012). Each year, the sites are asked to update their data from the previous year. As an example, the sites used the ATWIR-2011 (data cutoff 12/31/2010) information to update the data used for this report. TRU waste sites may use information obtained from site-specific AK reports, which provide the most current information on waste streams being characterized and shipped to WIPP, such as chemical lists and radionuclides. All TRU waste inventory information for emplaced waste is obtained from the CBFO WDS administrator.

1.3 Uses of Transuranic Waste Inventory Information

Waste stream volumes are accounted for in both "current form" (current packaging) and "final form" (planned WIPP-compliant packaging) configurations. These configurations are useful in various waste management scenarios. CBFO management has used this strategic inventory information for decisions related to waste retrieval, treatment, repackaging, characterization, shipment, and disposal for both stored and projected waste initiatives in past years. Also, site-specific project plans and schedules, which detail approaches for moving TRU waste to WIPP, have been developed and are updated based on current TRU waste inventory information. As mentioned earlier, when inventory data are needed for PA modeling, CBFO will request a PAIR to be prepared that provides the latest inventory data available that are scaled using a defined methodology in order to model a full repository.

In addition to radiological information, DOE has many reasons for obtaining and tracking non-radiological information about the TRU waste destined for WIPP. For example, DOE tracks the waste materials that go into the WIPP repository, such as cellulose, plastic, and rubber (CPR), which might affect gas generation and emplacement of magnesium oxide (MgO) in the repository.

As noted earlier, additional TRU waste inventory information is provided in Appendices A, B, C, and D.

2.0 METHODOLOGY

This report was generated using documented processes and methods that are qualified under the LANL-CO QA Program (see section 1.1). The following steps were completed in order to generate this report:

1. Collected TRU waste stream information from the TRU waste sites and then entered and verified the updated information in the CID (see Figure 2-1).

2. Performed a complete review of all data to check for inconsistencies, erroneous data, and completeness.

3. Generated the required data tables, using the CID.

4. Performed analyses, where appropriate, to supplement CID data for publication within this report.

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 the calculations used in the CID reports, including the decay correction of radionuclides. Section 2.3 describes the transformation activities performed on the WDS emplaced waste data prior to input in the CID.

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

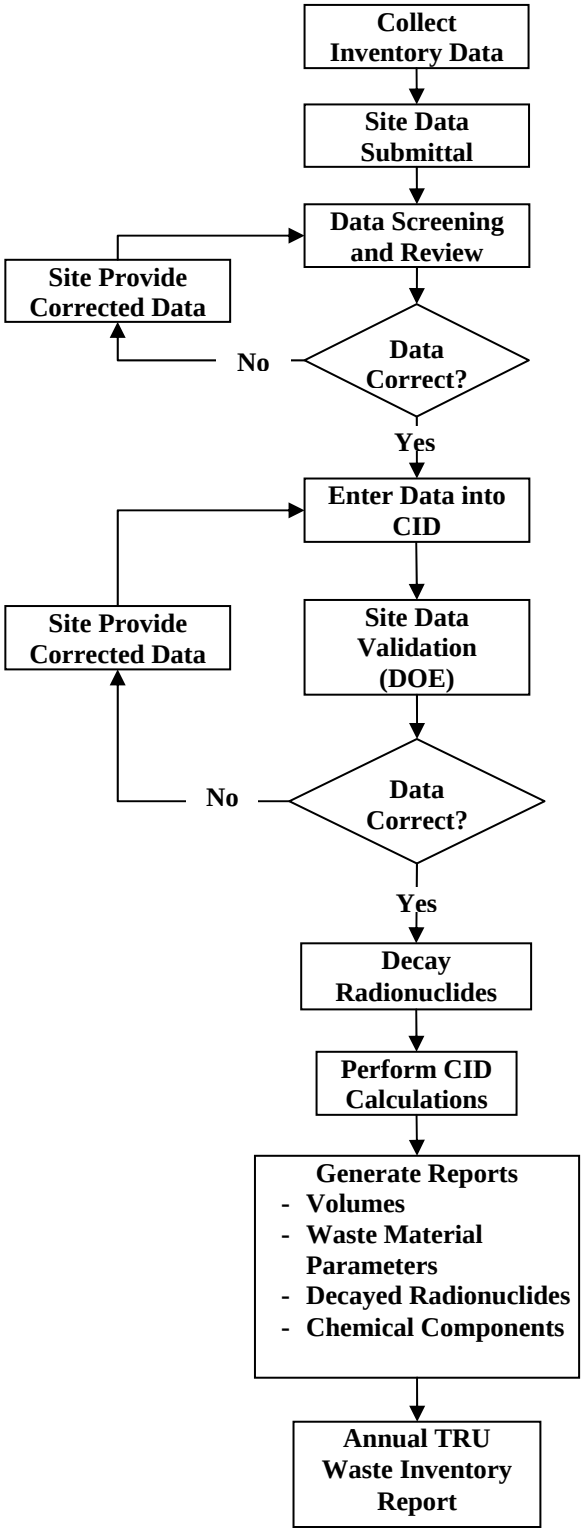
The process used to collect information from the TRU waste sites is captured in LANL-CO Procedure INV-SP-01, *Data Collection, Data Management and Control for the Comprehensive Inventory* (LANL-CO 2011a). On January 24, 2012, in accordance with this procedure, a letter (Patterson 2012) was sent to TRU waste sites requesting the annual TRU waste inventory update. The Inventory Team then sent each site a notification of the update with an attached file of the Microsoft® Excel data template (DT) workbook containing last year's validated data along with guidance explaining the steps required to update the DT with the site's new information. The Inventory Team worked with personnel from every site to assist in the updating process and to resolve any issues that arose.

After the DTs were completed, the team checked them for accuracy and consistency. During these data checks, the Inventory Team verified that the inventory updates included all of the requested information. The Inventory Team contacted the sites if there were discrepancies in the data. Examples of the data checks were:

- Verification of radionuclide isotopic inputs (i.e., checked for presence of all fission products);
- Verification of isotopic distribution for material type codes (e.g., plutonium [Pu]-52 and mixed fission products);
- Verification of radionuclide threshold limits to determine if the waste stream appeared to be categorized correctly as CH or RH;
- Verification that activity concentration for RH-TRU waste did not exceed the LWA limits (i.e., waste streams reported with greater than 23 Ci/l [curies per liter] averaged over the volume of the RH-TRU canister were screened out of the WIPP-bound inventory);
- Verification that if cement was reported in a comment field, it was also reported as a WMP in kilograms (kg);
- Verification that any hazardous waste that is prohibited at WIPP had an appropriate treatment identified;
- Comparison of the ATWIR-2012 waste stream data to the ATWIR-2011 waste stream data to identify any significant differences found.

The process followed for entering TRU waste inventory information into the CID is captured in LANL-CO Procedure INV-SP-02, *Entry, Verification, and Validation of Inventory Information in the Comprehensive Inventory Database* (LANL-CO 2011b). In accordance with this procedure, the TRU waste inventory information was uploaded from the Excel DT or entered manually into the CID. Once the data were entered, waste stream data (validation) reports were prepared and sent to the DOE TRU waste managers at the sites. A validation letter signed by the DOE site representative and site contractor (contractor signature optional) documented the correctness of the information as reported in the CID. Hard copies of the validation report and signed validation letters were then submitted to the LANL-CO Record Center (see Figure 2-1 for a flow chart of the TRU waste inventory process). The CID data were then labeled as data version D.11.00 and protected from further revision.

Figure 2-1. TRU Waste Inventory Process Flowchart



2.2 Calculations Used for CID Reports

Data tables included in this report were generated using the CID. The CID is a database developed by LANL-CO and qualified for use under the LANL-CO QA Program in accordance with the *LANL-CO Software Quality Assurance Plan* (LANL-CO 2011c) and *Software Quality Assurance* (LANL-CO 2011d). The CID is used to manage, maintain, and perform specific qualified calculations using inventory data. The data are then used to generate qualified data reports and tables.

Stored, projected, and anticipated values presented throughout this report are summations of the individual waste stream values for the specified categories (site, handling designation, etc.).

The following sections describe how the data were prepared for this report.

2.2.1 Volume Reporting

As part of the data call for this report, the TRU waste sites were asked to update the current form container information for their stored (already generated and stored at the site) and projected (future generation) TRU waste. For each waste stream, the sites also provided WIPP-compliant final form container type(s) that would ultimately be used to ship the waste to the WIPP and determined the respective stored and projected counts for each container type based on the current form volume of the waste. The emplaced waste streams' container counts and volumes were obtained from the CBFO WDS administrator (see section 2.3). The emplaced waste stream volumes were directly imported from the WDS and used in reporting the emplaced portion of the inventory. Final form stored and projected site waste stream volumes found within this report were derived by applying standardized container type volumes, which are maintained within the CID.

2.2.2 Waste Material Parameter and Packaging Materials Reporting

As part of the data call for this report, the TRU waste sites were asked to update each waste stream's mass, in kg, for WMPs, or physical materials contained in the waste. See section 3.2.1 for a description of these WMPs.

The sites were directed to only report the mass of the stored waste at their sites, even if they had a projected component in the waste stream. The CID then derived a projected mass using the projected-to-stored volume ratio for each waste stream. The anticipated mass was calculated by summing the stored and projected masses. However, if a waste stream consisted only of projected waste, then the sites were requested to report their estimates of the projected mass for each WMP for that particular waste stream.

The PMs, as described in section 3.2.2, are specific to each of the individual final form container types, with each PM being a proportional contributor to a waste stream's overall PM makeup based upon the respective container counts reported. These PMs are standardized and defined for each container type and reported in INV-SAR-19, *Analysis of Container Material Masses* (French 2009).

Appendices A and B present a list of average WMP and PM densities (kilograms per cubic meter [kg/m^3]) for each waste stream. These were calculated by dividing the total mass of each material in the waste stream by the total final form volume of the waste stream.

2.2.3 Radionuclide Reporting

The TRU waste sites were asked to update information about the radiological components in their TRU waste. For each waste stream, they were asked to assess and update, if necessary, radionuclides and their associated activity in curies (Ci). In addition, the TRU waste sites were asked to provide the generation or last assay date for each waste stream. This date was then used to determine the time basis for decay and buildup calculations.

The sites were directed to only report the activity of the waste stored at their sites, even if a waste stream had a projected component. The CID then derived a projected activity using the projected-to-stored volume ratio for each waste stream for that projected component. The anticipated activity was calculated by summing the stored and projected activities. However, if a waste stream consisted only of projected waste, then the activity reported by the site, and subsequently by the CID, was categorized as projected activity for that particular waste stream.

Since radionuclide data provided by the TRU waste sites consisted of radionuclide activities at the date of assay (generation or as calculated), they were decay-corrected to common dates for reporting purposes. All radionuclide data provided in this report in Table 3-10, Table 3-11, Table 3-12**,** and in Appendix A were decay-corrected to the end of the common base CY 2011. In order to identify changes in the radionuclide inventory (discussed in section 3.3.2, from previous TRU waste inventory reports, radionuclide activities were decay-corrected to the end of the WIPP proposed closure year, CY 2033.

The CID automates the radionuclide decay process by utilizing the ORIGEN-S module of SCALE 6 (ORNL 2009), which is a depletion and decay library that has been qualified for use under the LANL-CO QA Program, in accordance with *LANL-CO Software Quality Assurance Plan* (LANL-CO 2011c), and *Software Quality Assurance* (LANL-CO 2011d). The CID first takes the radionuclide activities reported by the TRU waste sites and exports them in the form of ORIGEN-S input files for each waste stream. It then executes ORIGEN-S in a sequential fashion for each input file, where the radionuclide decay and buildup calculations are performed and written to an output file. Finally, each output file is read and imported back into the CID, resulting in decay-corrected radionuclide tables to be generated for this report.

Appendices A and B present a list of average radionuclide concentrations (curies per cubic meter [Ci/m^3]) for each waste stream. These were calculated by dividing the total activity of each radionuclide in the waste stream by the total final form volume of the waste stream.

2.2.4 Chemical Constituent Reporting

As part of the data call for this report, the TRU waste sites were asked to update information about the chemical constituents of their waste. The sites were requested to report stored and projected mass separately for their complexing agents (acetic acid, citric acid, oxalic acid, acetate, citrate, oxalate, and ethylenediaminetetraacetic acid [EDTA]), oxyanions (nitrates, phosphates, and sulfates), and other chemical constituents in units of mass (kg).

2.3 Analyses Supporting the Annual Transuranic Waste Inventory Report

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, an analysis was performed and documented in accordance with LANL-CO QA Procedure LCO-QP9-1, *Analyses* (LANL-CO 2010), in order to support the preparation of this report. To account for TRU waste emplaced in the WIPP repository from January 1, 2011, through December 31, 2011 (the ATWIR-2012 "reporting period"), a documented request was made of the CBFO WDS database administrator to supply data for the waste emplaced as of December 31, 2011. To update the TRU waste emplaced inventory data within the CID, the WDS data submittal was first migrated into a standardized CID Import Template (CIT) file. This migration required that the original WDS data submittal undergo various transformations, including, but not limited to, calculations, aggregations, and data mapping. These activities and calculations are documented in INV-SAR-26, *WDS Data Transformation for Insertion in the 2011 Inventory CID Import Template* (Van Soest 2012). The CIT file was subsequently used to update the CID.

The emplaced inventory is presented as a repository-level summation under "WIPP (Emplaced)" in section 3.0, under specific component sections, e.g., volumes, WMPs and PMs, and radionuclides. Chemical constituents are not reported in the emplaced inventory because the WDS does not track these constituents. The readers of this report who want more specific information on emplaced waste should make a request of CBFO so that the data can be obtained directly from the WDS, which is the official database of record for emplaced waste.

3.0 TRANSURANIC WASTE INVENTORY ESTIMATES AND CHANGES

This section presents the TRU waste inventory data that were collected and entered into the CID, internally reviewed and verified, validated by the TRU waste sites, and labeled as data version D.11.00 (LANL-CO 2012), as discussed in section 2.1. It should be noted that all table values in this report are presented to three significant figures.

This report is different in two respects from ATWIR-2011. In this report, the net changes in volumes, waste and packaging materials masses, complexing agent mass, oxyanion mass, and radionuclide activity between ATWIR-2011 and ATWIR-2012 are presented in tables within the report (Table 3-3, Table 3-5, Table 3-7, Table 3-9, and Table 3-13). In prior reports, these changes were listed and discussed in a separate appendix. Secondly, to be consistent with the other data presented in section 3.0, the complexing agent and oxyanion data are reported as site totals in this report rather than by individual site waste streams.

Section 3.1 presents the final form TRU waste volume for CH- and RH-TRU waste and a discussion of changes since ATWIR-2011 was issued. Section 3.2 presents the non-radiological properties of the TRU waste inventory as reported by the sites and a discussion of changes that have occurred during this reporting period. This includes roll-ups of the WMPs, PMs, chemical components, and includes a discussion of changes since ATWIR-2011. Section 3.3 presents the TRU waste radionuclide activities reported by the sites, which have been decayed through common base CY 2011. This section also presents a discussion of changes that have occurred in the total CH- and RH-TRU waste activity since ATWIR-2011.

3.1 TRU Waste Volume Estimates

This section presents the TRU waste inventory final form volume estimates that were collected for this report.

3.1.1 TRU Waste Inventory Total Volumes by Site

As stated earlier, TRU waste volume information requested from the TRU waste sites falls into two categories: stored waste (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 at the site, including decontamination and decommissioning [D&D] waste). 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 container information for their waste streams. The current form accounts for the current packaging configuration of the waste, while the final form volume accounts for the eventual packaging configuration suitable for WIPP emplacement**.** The information presented in the tables of this section contains only final form data. The sites' current form container types and volumes can be found in Appendices A and B.

Table 3-1 shows the total CH-TRU waste volume stored, projected, and anticipated (stored plus projected) totals. An estimated anticipated final form total of approximately 68,000 m^3 of CH-TRU waste is currently being reported at the sites and could be shipped to WIPP in the future, provided all WIPP requirements are met. Almost 98% of the anticipated CH-TRU waste is stored or will be generated at LQSs: Hanford Richland (RL), Idaho National Laboratory (INL), Los Alamos National Laboratory (LANL), Oak Ridge National Laboratory (ORNL), and the Savannah River Site (SRS). During the inventory collection period of January through December 2011, INL, LANL, ORNL, RL, and SRS shipped CH-TRU waste to WIPP. (See Table 3-3 for changes to CH-TRU waste volumes reported between ATWIR-2011 and ATWIR-2012.)

Table 3-2 shows the total RH-TRU waste volume stored, projected, and anticipated. An estimated anticipated final form total of about 3,570 m^3 of RH-TRU waste is currently being reported by the sites and could be shipped to WIPP in the future, provided all of the WIPP requirements are met. Approximately 95% of the anticipated RH-TRU waste is stored or will be generated at LQSs: RL, INL, LANL, ORNL, and SRS. During the inventory collection period of January through December 2011, Argonne National Laboratory (ANL), Bettis Atomic Power Laboratory (BAPL), INL, ORNL, Sandia National Laboratories (SNL) and SRS shipped RH-TRU waste to WIPP. (See Table 3-3 for changes to RH-TRU waste volumes reported between ATWIR-2011 and ATWIR-2012.)

Table 3-1. CH Waste Inventory Total Volumes

TRU Waste Site	Stored Volumes (m^3)	Projected Volumes (m^3)	Anticipated Volumes (m^3)
Argonne National Laboratory - East	1.41E+01	6.66E+01	8.07E+01
Hanford (Richland) Site	1.58E+04	4.30E+03	2.01E+04
Idaho National Laboratory	2.81E+04	1.50E+02	2.83E+04
Knolls Atomic Power Laboratory - Nuclear Fuel Services	3.02E+01	2.93E+02	3.24E+02
Lawrence Berkeley National Laboratory	4.16E-01	4.16E-01	8.32E-01
Lawrence Livermore National Laboratory	1.94E+02	6.97E+02	8.91E+02
Los Alamos National Laboratory	6.80E+03	3.08E+03	9.88E+03
Material and Fuels Complex	4.37E+00	3.20E+01	3.64E+01
Nevada National Security Site	3.94E+01	5.10E+01	9.05E+01
Nuclear Radiation Development Site	1.87E+00	4.99E+00	6.86E+00
Oak Ridge National Laboratory	8.35E+02	1.10E+02	9.45E+02
Sandia National Laboratories	8.32E-01	4.99E+00	5.82E+00
Savannah River Site	3.37E+03	3.98E+03	7.35E+03
Grand Total	**5.52E+04**	**1.28E+04**	**6.80E+04**

Data Source: CID Data Version D.11.00 LANL-CO 2012. Note: This table contains data for WIPP-bound waste streams only; it does not include data for emplaced or potential waste streams.

Table 3-2. RH Waste Inventory Total Volumes

TRU Waste Site	Stored Volumes (m^3)	Projected Volumes (m^3)	Anticipated Volumes (m^3)
Argonne National Laboratory - East	1.99E+01	1.80E+01	3.79E+01
Bettis Atomic Power Laboratory	--	4.99E+00	4.99E+00
Hanford (Richland) Site	1.53E+03	9.14E+02	2.44E+03
Idaho National Laboratory	2.30E+02	--	2.30E+02
Knolls Atomic Power Laboratory - Schenectady	--	1.31E+01	1.31E+01
Los Alamos National Laboratory	7.92E+01	--	7.92E+01
Material and Fuels Complex	8.85E+00	9.61E+01	1.05E+02
Oak Ridge National Laboratory	4.58E+02	1.55E+02	6.13E+02
Sandia National Laboratories	2.50E+00	--	2.50E+00

Table 3-2. RH Waste Inventory Total Volumes
Continued

TRU Waste Site	Stored Volumes (m^3)	Projected Volumes (m^3)	Anticipated Volumes (m^3)
Savannah River Site	2.97E+01	1.12E+01	4.09E+01
Grand Total	**2.36E+03**	**1.21E+03**	**3.57E+03**

Data Source: CID Data Version D.11.00 LANL-CO 2012. Note: This table contains data for WIPP-bound waste streams only; it does not include data for emplaced or potential waste streams.

3.1.2 Changes to TRU Waste Volumes

Table 3-3 shows the total net changes for final form total volumes (anticipated) of CH- and RH-TRU waste between ATWIR-2011 and this report. The net change column applies to the total net changes, which include both increases and decreases as reported by the sites and the amount of emplaced waste taken from the WDS. As shown, the total net change is a decrease of nearly 8,500 m^3, with the bulk of that decrease resulting from emplacement of about 7,230 m^3. The remaining decrease of almost 1,270 m^3 is attributed mainly to one waste stream, SR-W026-PDCF-1, with a volume of approximately 1,130 m^3, which was deleted because the project that would have generated the waste, the Pit Disassembly and Conversion Facility (PDCF), was cancelled.

Table 3-3. CH/RH Waste Volume Changes

TRU Waste Site	ATWIR-2011 Total Inventory (m^3)	ATWIR-2012 Total Inventory (m^3)	Total Net Change (m^3)
Hanford (Richland) Site	2.17E+04	2.25E+04	8.53E+02
Idaho National Laboratory	3.53E+04	2.85E+04	-6.76E+03
Los Alamos National Laboratory	1.02E+04	9.96E+03	-2.90E+02
Oak Ridge National Laboratory	1.42E+03	1.56E+03	1.38E+02
Savannah River Site	9.70E+03	7.39E+03	-2.32E+03
Small Quantity Sites	1.73E+03	1.60E+03	-1.26E+02
Anticipated Total	**8.00E+04**	**7.15E+04**	**-8.50E+03**
WIPP (Emplaced)	7.24E+04	7.97E+04	7.23E+03
Grand Total	**1.52E+05**	**1.51E+05**	**-1.27E+03**

Data Source: CID Data Versions D.10.01 (LANL-CO 2011e) and D.11.00 (LANL-CO 2012).

3.2 Non-Radiological Material Estimates

This section presents the non-radiological properties of the TRU waste inventory collected for this report. DOE has many reasons for obtaining and tracking non-radiological information about the TRU waste inventory destined for WIPP. For example, DOE tracks waste materials that are emplaced in the repository, such as CPR materials that might affect gas generation in the repository.

Section 3.2.1 presents the inventory of waste material parameters, section 3.2.2 presents packaging materials, and section 3.2.3 presents the chemical components.

3.2.1 Waste Material Parameters

WMPs are reported as final form mass (kg). If a waste stream includes stored and projected waste, the site provides the stored mass and the projected mass is derived in the CID based on the stored final form mass. If a site only has projected waste, then the site provides the projected final form mass. See section 2.2.2 for details on how WMPs are reported.

The following WMP descriptions are used for 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-based 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 Materials – Inorganic non-metal waste materials such as concrete, glass, firebrick, ceramics, graphite, sand, and inorganic sorbents.

- Vitrified – 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-based metal/alloys WMP.)

- Cellulosics – Materials generally derived from high-polymer plant carbohydrates such as paper, cardboard, Kimwipes®, wood, cellophane, and cloth.

- Plastic – Generally man-made, often derived from petroleum feedstock. Examples are polyethylene, polyvinyl chloride, Lucite®, and Teflon®.

- Rubber – Natural or manmade elastic latex materials, such as Hypalon®, neoprene, surgical gloves, and leaded-rubber gloves (rubber part only).

- Solidified Inorganic Material (Inorganic Matrix) – Any homogeneous materials consisting of sludge or aqueous-based liquids that have been solidified. Examples are wastewater treatment sludge and inorganic particulates.

- Solidified Organic Material (Organic Matrix) – Organic resins, solidified organic liquids, and sludges.

- Cement – An agent used to solidify liquids, particulates, and sludge. Cement may be reacted, unreacted, or both.

- Soils – Generally consist of naturally occurring soils that have been contaminated with radioactive waste materials at a high enough level to be considered TRU waste.

The estimated WMP and PM anticipated masses for CH- and RH-TRU waste are presented in Table 3-4.

Table 3-4. CH/RH Waste and Packaging Material Inventory

Waste Material	CH Mass (kg)	RH Mass (kg)	Total Mass (kg)
Iron-based Metal/Alloys	2.70E+06	6.70E+05	3.37E+06
Aluminum-based Metal/Alloys	2.08E+05	1.42E+04	2.23E+05
Other Metal/Alloys	2.54E+05	3.71E+05	6.26E+05
Other Inorganic Materials	2.31E+06	8.84E+05	3.19E+06
Cellulose	9.20E+05	9.19E+04	1.01E+06
Rubber	4.29E+05	6.89E+04	4.98E+05
Plastic	1.53E+06	1.83E+05	1.71E+06
Cement	2.48E+06	3.60E+05	2.84E+06
Solidified Inorganic Material	3.49E+06	1.71E+04	3.51E+06
Solidified Organic Material	1.61E+06	1.85E+03	1.61E+06
Soils	2.41E+06	1.39E+05	2.55E+06
Vitrified	--	--	--
Packaging Material, Cellulose	2.85E+04	--	2.85E+04
Packaging Material, Plastic	9.04E+05	1.49E+05	1.05E+06
Packaging Material, Rubber	2.62E+04	2.05E+03	2.82E+04
Packaging Material, Steel	1.13E+07	3.39E+06	1.47E+07
Packaging Material, Lead	--	8.44E+02	8.44E+02
Grand Total	**3.06E+07**	**6.34E+06**	**3.69E+07**

Data Source: CID Data Version D.11.00, LANL-CO 2012. Note: This table contains data for WIPP-bound waste streams only; it does not include data for emplaced or potential waste streams.

3.2.2 Packaging Materials

PMs (such as steel, plastic, cellulose, lead, and rubber) are the materials used to construct the containers that hold TRU waste. The PM masses for the WIPP-approved payload containers are fixed values in the CID. The sites report the final form container type, and the CID generates the PM masses using consistent values associated with the container type. An analysis was performed (French 2009) to calculate the PM masses to be assigned to the various WIPP-approved container types in the CID. The purpose of that analysis was to document the calculations that provide the PM masses for steel, plastic, cellulose, lead, and rubber used in the containers that package CH- and RH-TRU waste for shipment to WIPP. The estimated PM anticipated masses for CH- and RH-TRU waste are presented in Table 3-4.

3.2.3 Waste and Packaging Material Parameter Changes

The changes in WMP and PM data between ATWIR-2011 and this report are presented in Table 3-5 for the total CH- and RH-TRU waste and packaging materials. Data for the WMPs and PMs improve as additional waste is characterized and the sites use that characterization data to estimate the waste remaining in that waste stream at the site. As stated earlier, the net change column applies to the total net changes, which include both increases and decreases as reported by the sites and the amount of emplaced waste taken from the WDS. As shown in Table 3-5, there was a total decrease in WMPs of about 2.33 million kg and a decrease of about 1.73 million kg of PMs. A total of approximately 2.75 million kg WMPs and 1.38 million kg PMs were emplaced during this reporting period. All the WMP masses decreased except soils, which show an increase of nearly 1.32 million kg that comes mostly from the addition of approximately 2,200 m^3 of waste containing roughly 1.2 million kg of soils (associated with waste stream RL200-02). This waste is a result of additional soil cleanup based on the issuance of a CERCLA ROD (EPA, Ecology, and DOE 2011). There was a decrease in cement of about 1.01 million kg. The largest contributing waste stream to this net reduction is KN-B234TRU, with a reduction of nearly 462,000 million kg resulting from the site's decision not to use cement to solidify the waste. A lesser contributor to this decrease stems from waste stream IN-W216R; upon rolling the waste stream into IN-BNINW216, it was discovered that approximately 289,000 kg had been double-counted. The iron-based metal/alloys decreased by nearly 1.14 million kg, with most of this decrease coming from waste stream LA-MHD01.001 (about 826,000 kg), which is a result of a decrease in the projected volume and re-evaluation of the WMPs in the waste stream based on characterization.

Table 3-5. CH/RH Waste and Packaging Material Inventory Changes

Waste Material Parameter	ATWIR-2011 Mass (kg)	ATWIR-2012 Mass (kg)	Mass Net Change (kg)
Iron-based Metal/Alloys	4.52E+06	3.37E+06	-1.14E+06
Aluminum-based Metal/Alloys	2.69E+05	2.23E+05	-4.69E+04
Other Metal/Alloys	7.84E+05	6.26E+05	-1.58E+05
Other Inorganic Materials	3.16E+06	3.19E+06	2.69E+04

Table 3-5. CH/RH Waste and Packaging Material Inventory Changes
Continued

Waste Material Parameter	ATWIR-2011 Mass (kg)	ATWIR-2012 Mass (kg)	Mass Net Change (kg)
Cellulose	1.07E+06	1.01E+06	-5.47E+04
Rubber	6.25E+05	4.98E+05	-1.27E+05
Plastic	2.08E+06	1.71E+06	-3.75E+05
Cement	3.85E+06	2.84E+06	-1.01E+06
Solidified Inorganic Material	3.92E+06	3.51E+06	-4.11E+05
Solidified Organic Material	1.96E+06	1.61E+06	-3.54E+05
Soils	1.23E+06	2.55E+06	1.32E+06
Vitrified	--	--	--
Anticipated Waste Total	**2.35E+07**	**2.11E+07**	**-2.33E+06**
WIPP (Emplaced) Waste Total	2.18E+07	2.46E+07	2.75E+06
Package Material			
Packaging Material, Cellulose	2.02E+04	2.85E+04	8.39E+03
Packaging Material, Plastic	1.18E+06	1.05E+06	-1.23E+05
Packaging Material, Rubber	3.22E+04	2.82E+04	-3.96E+03
Packaging Material, Steel	1.63E+07	1.47E+07	-1.60E+06
Packaging Material, Lead	1.20E+04	8.44E+02	-1.11E+04
Anticipated Packaging Total	**1.75E+07**	**1.58E+07**	**-1.73E+06**
WIPP (Emplaced) Packaging Total	1.68E+07	1.81E+07	1.38E+06
Grand Total	**7.96E+07**	**7.97E+07**	**6.67E+04**

Data Source: CID Data Versions D.10.01 (LANL-CO 2011e) and D.11.00 (LANL-CO 2012).

3.2.4 Chemical Components

DOE tracks the mass (kg) of complexing agents and oxyanions as part of the non-radiological components. This report is the mechanism that DOE uses to track these components for currently stored and projected TRU waste at the sites. These masses for this report are presented in Table 3-6 and Table 3-8. For details on the reporting methods on chemical components, see section 2.2.4.

3.2.4.1 Complexing Agents

DOE tracks the mass (kg) of complexing agents destined for emplacement in the WIPP repository because of their potential impact on solubilities of actinides in the waste. For this inventory report, the TRU waste sites were asked to update their estimates of complexing agents in the waste streams (Patterson 2012). Table 3-6 presents a summary of the estimated CH- and RH-TRU waste complexing agents mass by site and the grand total of the masses.

Table 3-6. CH/RH Complexing Agent Mass by Site

TRU Waste Site	Acetate (kg)	Acetic Acid (kg)	Citrate (kg)	Citric Acid (kg)	EDTA (kg)	Oxalate (kg)	Oxalic Acid (kg)
Argonne National Laboratory - East	--	--	--	--	--	--	2.68E+01
Hanford (Richland) Site	6.25E+03	3.00E+03	3.65E+01	1.01E+03	5.21E+00	1.96E+01	3.44E+03
Idaho National Laboratory	5.07E+02	2.23E+03	1.77E+02	4.58E+01	1.43E+02	--	8.43E+01
Lawrence Livermore National Laboratory	--	7.28E+00	--	7.28E+00	7.28E+00	--	7.28E+00
Los Alamos National Laboratory	--	7.35E+00	--	3.87E+02	--	--	2.13E+03
Grand Total	**6.76E+03**	**5.25E+03**	**2.14E+02**	**1.45E+03**	**1.56E+02**	**1.96E+01**	**5.69E+03**

Data Source: CID Data Version D.11.00 LANL-CO 2012. Note: This table contains data for WIPP-bound waste streams only; it does not include data for emplaced or potential waste streams**.**

3.2.4.2 Changes to Complexing Agents

Table 3-7 shows the changes in the estimated CH- and RH-TRU waste complexing agent masses (kg) between the ATWIR-2011 and this report. These data represent only the complexing agents that are currently being reported by the sites in their anticipated TRU waste inventory and do not include complexing agents that have been emplaced at WIPP because these components are not tracked in the WDS.

There was an overall net decrease of approximately 2,140 kg in the estimated CH- and RH-TRU waste complexing agents mass for this reporting period. The majority of this decrease comes from the acetic acid constituent of about 1,200 kg that results from waste streams RL-PFP-01 (nearly 387 kg decrease) and IN-ID-SDA-Sludge (around 792 kg decrease). Since the WDS does not contain these data, it is assumed that these decreases occurred because these waste streams are actively being shipped to and emplaced at WIPP.

Table 3-7. CH/RH Complexing Agent Changes

Complexing Agent	ATWIR-2011 Total Mass (kg)	ATWIR-2012 Total Mass (kg)	Total Net Change (kg)
Acetate	7.56E+03	6.76E+03	-8.04E+02
Acetic Acid	6.44E+03	5.25E+03	-1.20E+03
Citrate	2.18E+02	2.14E+02	-3.59E+00

Table 3-7. CH/RH Complexing Agent Changes
Continued

Complexing Agent	ATWIR-2011 Total Mass (kg)	ATWIR-2012 Total Mass (kg)	Total Net Change (kg)
Citric Acid	1.51E+03	1.45E+03	-6.44E+01
EDTA	1.56E+02	1.56E+02	-1.17E-02
Oxalate	2.11E+01	1.96E+01	-1.51E+00
Oxalic Acid	5.76E+03	5.69E+03	-7.12E+01
Grand Total	**2.17E+04**	**1.95E+04**	**-2.14E+03**

Data Source: CID Data Versions D.10.01 (LANL-CO 2011e) and D.11.00 (LANL-CO 2012). Note: This table contains data for WIPP-bound waste streams only; it does not include data for emplaced or potential waste streams.

3.2.4.3 Oxyanions

Estimates of the masses of nitrates, phosphates, and sulfates expected in the TRU waste were also requested from the TRU waste sites. The sites reported estimates of oxyanions in their waste as mass (kg) for both stored and projected waste. Table 3-8 presents the estimated CH- and RH-TRU waste oxyanion mass by site.

Table 3-8. CH/RH Oxyanion Mass by Site

TRU Waste Site	Nitrate (kg)	Phosphate (kg)	Sulfate (kg)
Argonne National Laboratory - East	5.22E-01	1.45E-01	2.23E-01
Hanford (Richland) Site	1.24E+05	1.17E+05	1.82E+04
Idaho National Laboratory	3.09E+05	2.38E+04	6.99E+04
Lawrence Berkeley National Laboratory	9.60E-02	--	--
Lawrence Livermore National Laboratory	7.28E+00	7.28E+00	7.28E+00
Los Alamos National Laboratory	3.30E+05	--	7.47E+04
Sandia National Laboratories	1.00E-06	--	--
Grand Total	**7.62E+05**	**1.41E+05**	**1.63E+05**

Data Source: CID Data Version D.11.00 (LANL-CO 2012). Note: This table contains data for WIPP-bound waste streams only; it does not include data for emplaced or potential waste streams.

3.2.4.4 Changes to Oxyanions

Table 3-9 shows the changes in the estimated CH- and RH-TRU waste oxyanion masses (kg) since they were reported in the ATWIR-2011. These data represent only the oxyanions that are

currently being reported by the sites as anticipated TRU waste inventory and do not include oxyanions that have been emplaced at WIPP.

An overall net decrease of approximately 114,000 kg of oxyanions is attributed to three waste streams. Waste stream IN-BN005 was determined to be low-level waste (LLW) and has been removed from the TRU waste inventory, which accounts for a reduction of nearly 32,500 kg of nitrates. Waste stream IN-ID-SDA-Sludge is actively being characterized and shipped and accounts for a decrease in nitrates of approximately 17,200 kg and a decrease in sulfates of about 24,200 kg. RL-PFP-01 was actively being characterized and shipped in CY2011 and accounts for a decrease of around 14,600 kg of nitrates and almost 14,400 kg of phosphates. Since the WDS does not contain these data, it is assumed that these decreases are a result of the waste being shipped to WIPP.

Table 3-9. CH/RH Oxyanion Changes

Oxyanion	ATWIR-2011 Total Mass (kg)	ATWIR-2012 Total Mass (kg)	Total Net Change (kg)
Nitrate	8.25E+05	7.62E+05	-6.27E+04
Phosphate	1.66E+05	1.41E+05	-2.45E+04
Sulfate	1.90E+05	1.63E+05	-2.68E+04
Grand Total	**1.18E+06**	**1.07E+06**	**-1.14E+05**

Data Source: CID Data Versions D.10.01 (LANL-CO 2011e) and D.11.00 (LANL-CO 2012)

3.3 TRU Waste Radionuclide Estimates

This section presents the TRU waste radionuclide activity inventory collected from the sites as of the end of CY 2011. The sites' TRU waste stream radionuclide activities are decay-corrected through the end of CY 2011 (as described in section 2.2.3), in curies. The data are then aggregated using the CID and placed into tables by site for CH- and RH-TRU wastes.

The radionuclides in the WPRs in Appendix A (WIPP-bound TRU Waste Profile Reports) are reported in activity concentrations (Ci/m^3) based on the final form waste stream volume. These concentrations are calculated by dividing the decay-corrected activity of each radionuclide in the waste stream by the total volume of the waste stream as discussed in section 2.2.3 of this report. Radionuclide activity concentrations presented in Appendix B (Potential TRU Waste Profile Reports) are not decay-corrected**.**

3.3.1 Radionuclide Inventory by Site

Table 3-10 and Table 3-11 provide the comprehensive WIPP-bound anticipated activity (Ci) inventory estimates for CH- and RH-TRU waste, respectively. Table 3-12 sums the CH and RH site totals to produce a total anticipated activity by site.

Table 3-10. Total CH Radionuclide Activity (Ci) on a Site Basis Decayed through 2011

Radionuclide	ANLE	Hanford	INL	KAPL-NFS	LANL	LBNL	LLNL	MFC	NNSS	NRD	ORNL	SNL	SRS	Grand Total
Ac-225	3.83E-07	2.93E-06	1.87E-04	7.97E-03	1.26E-01	--	1.97E-03	4.25E-11	1.61E-12	8.51E-16	1.74E-03	5.21E-18	3.36E-03	**1.41E-01**
Ac-227	1.37E-08	9.42E-09	1.34E-06	4.75E-05	6.28E-01	--	1.02E-02	5.77E-10	2.55E-10	--	1.16E-01	9.78E-16	1.72E-02	**7.71E-01**
Ac-228	1.10E-06	1.45E-05	2.57E-04	3.45E-01	1.04E-03	--	3.14E-06	7.85E-10	3.65E-16	--	5.40E-02	6.00E-20	1.20E-01	**5.20E-01**
Ag-108	8.16E-05	--	--	--	2.98E-07	--	--	--	--	--	--	--	--	**8.19E-05**
Ag-108m	9.38E-04	--	--	--	3.43E-06	--	--	--	--	--	--	--	--	**9.41E-04**
Ag-109m	2.63E-06	--	--	--	2.37E+03	--	4.48E-03	--	--	--	3.67E-12	--	--	**2.37E+03**
Ag-110m	--	--	--	--	--	--	--	--	--	--	1.50E+00	--	--	**1.50E+00**
Am-241	5.31E+00	5.64E+04	3.39E+04	8.02E+02	5.68E+04	3.21E-02	1.72E+03	8.20E+01	1.47E+01	3.32E+02	8.64E+02	2.68E-01	7.87E+04	**2.30E+05**
Am-242	6.67E-04	2.00E-02	--	--	--	--	7.89E+00	--	--	--	9.68E-01	--	1.20E-01	**9.00E+00**
Am-242m	6.70E-04	2.01E-02	--	--	--	--	7.93E+00	--	--	--	9.68E-01	--	1.21E-01	**9.04E+00**
Am-243	1.17E+00	6.58E-01	2.14E-02	--	1.00E+00	4.40E-05	2.41E-01	1.23E-01	--	--	5.23E+00	--	6.16E+00	**1.46E+01**
Am-244	--	--	--	--	--	--	--	--	--	--	1.00E-06	--	--	**1.00E-06**
Am-245	2.99E-08	--	--	--	7.64E-09	--	--	--	--	--	1.69E-19	--	--	**3.76E-08**
At-217	3.83E-07	2.93E-06	1.87E-04	7.97E-03	1.26E-01	--	1.97E-03	4.25E-11	1.61E-12	8.51E-16	1.74E-03	5.21E-18	3.36E-03	**1.41E-01**
Ba-133	1.82E-04	3.31E-04	--	--	1.08E-05	--	--	--	--	--	1.80E-07	--	1.21E-05	**5.36E-04**
Ba-137m	3.31E+00	3.50E+03	2.62E-03	--	9.01E+00	--	7.27E-01	3.18E-02	--	--	1.70E-01	--	2.93E+00	**3.52E+03**
Bi-210	8.91E-05	5.66E-05	1.51E-06	7.76E-04	1.21E-04	--	7.37E-09	1.24E-10	9.16E-12	--	3.00E-01	4.01E-18	2.48E-04	**3.01E-01**
Bi-211	1.37E-08	9.42E-09	1.34E-06	4.75E-05	6.29E-01	--	1.02E-02	5.77E-10	2.55E-10	--	6.66E-04	9.78E-16	1.73E-02	**6.57E-01**
Bi-212	7.67E-04	1.52E-04	2.42E-03	4.68E-01	6.86E-04	--	2.68E-03	3.22E-04	1.64E-16	--	2.91E-02	5.09E-21	2.34E-01	**7.38E-01**
Bi-213	3.83E-07	2.93E-06	1.87E-04	7.97E-03	1.26E-01	--	1.97E-03	4.25E-11	1.61E-12	8.51E-16	1.74E-03	5.21E-18	3.36E-03	**1.41E-01**
Bi-214	3.53E-04	1.88E-03	1.25E-05	6.08E-03	3.50E-04	--	2.44E-07	4.15E-09	2.27E-10	--	5.40E-01	5.27E-16	4.83E-04	**5.49E-01**
Bk-249	2.06E-03	--	--	--	5.27E-04	--	--	--	--	--	1.85E+01	--	--	**1.85E+01**
Bk-250	1.91E-09	--	--	--	--	--	--	--	--	--	--	--	--	**1.91E-09**
C-14	2.13E-03	6.00E-04	--	--	--	--	--	--	--	--	4.06E-04	--	7.33E-03	**1.05E-02**
Ca-45	5.33E-06	--	--	--	--	--	--	--	--	--	--	--	--	**5.33E-06**
Cd-109	2.63E-06	--	--	--	2.37E+03	--	4.48E-03	--	--	--	6.52E-05	--	--	**2.37E+03**
Cd-113	6.24E-04	--	--	--	--	--	--	--	--	--	--	--	--	**6.24E-04**
Cd-113m	3.46E-04	--	--	--	--	--	--	--	--	--	--	--	--	**3.46E-04**
Ce-139	--	--	--	--	--	--	--	--	--	--	7.52E-05	--	--	**7.52E-05**
Ce-141	--	--	--	--	--	--	--	--	--	--	2.38E+00	--	--	**2.38E+00**
Ce-144	4.52E-03	--	--	--	2.56E-04	--	--	3.20E-04	--	--	1.04E+00	--	3.68E-11	**1.05E+00**
Cf-249	2.35E-01	1.79E-02	3.72E-03	--	8.62E-03	4.20E+00	7.44E+00	--	--	--	1.00E+00	--	2.30E-03	**1.29E+01**
Cf-250	8.70E-03	--	--	--	--	1.42E-04	--	--	--	--	2.36E-01	--	1.71E-10	**2.45E-01**
Cf-251	1.18E-03	--	--	--	--	--	2.63E-04	--	--	--	2.84E-03	--	1.27E-03	**5.56E-03**
Cf-252	1.26E-03	--	--	--	--	--	3.35E-03	--	--	--	2.02E+02	--	--	**2.02E+02**
Cf-253	--	--	--	--	--	--	--	--	--	--	6.70E-04	--	--	**6.70E-04**
Cf-254	--	--	--	--	--	--	--	--	--	--	1.82E-05	--	--	**1.82E-05**
Cl-36	1.17E-07	--	--	--	2.78E-03	--	--	--	--	--	--	--	--	**2.78E-03**
Cm-242	5.38E-04	1.58E-02	2.31E-14	--	2.92E-04	--	6.24E+00	1.52E-13	--	--	1.18E+02	--	9.96E-02	**1.25E+02**
Cm-243	4.15E-02	6.16E-01	3.30E-03	--	5.87E-01	--	8.53E-02	4.20E-09	--	--	1.19E+02	--	8.51E-02	**1.21E+02**
Cm-244	2.46E+02	7.11E+01	6.31E-01	--	3.25E+03	--	8.13E+02	8.79E-01	--	--	4.64E+03	--	1.97E+02	**9.22E+03**
Cm-245	1.93E-04	--	1.97E-08	--	4.85E-04	--	4.16E-02	--	--	--	1.67E-02	--	6.41E-02	**1.23E-01**
Cm-246	1.08E-02	--	--	--	5.76E-01	--	--	--	--	--	6.37E-01	--	8.84E-02	**1.31E+00**
Cm-247	1.02E-09	--	--	--	--	--	3.52E-06	--	--	--	7.57E-05	--	1.09E-02	**1.10E-02**
Cm-248	6.37E-04	--	--	--	--	1.69E-04	1.79E-02	--	--	--	4.90E-02	--	2.05E-06	**6.77E-02**

Table 3-10. Total CH Radionuclide Activity (Ci) on a Site Basis Decayed through 2011

Continued

Radionuclide	ANLE	Hanford	INL	KAPL-NFS	LANL	LBNL	LLNL	MFC	NNSS	NRD	ORNL	SNL	SRS	Grand Total
Cm-250	1.36E-08	--	--	--	--	--	--	--	--	--	2.23E-03	--	--	**2.23E-03**
Co-60	1.23E-02	2.07E-01	2.13E-05	--	5.00E-04	--	1.44E-03	3.16E-04	--	--	5.06E-02	--	5.96E-03	**2.78E-01**
Cr-51	--	--	--	--	--	--	--	--	--	--	2.79E-01	--	--	**2.79E-01**
Cs-134	8.40E-02	1.07E+00	1.58E-07	--	1.43E-05	--	--	2.38E-04	--	--	6.52E-01	--	2.08E-04	**1.80E+00**
Cs-135	3.45E-07	--	--	--	--	--	--	--	--	--	--	--	--	**3.45E-07**
Cs-137	3.50E+00	3.72E+03	7.04E-02	--	9.60E+00	1.90E-04	7.70E-01	3.37E-02	--	--	1.32E+01	--	3.10E+00	**3.75E+03**
Es-253	--	--	--	--	--	--	--	--	--	--	8.02E+00	--	--	**8.02E+00**
Es-254	--	--	--	--	--	--	--	--	--	--	3.99E-04	--	--	**3.99E-04**
Eu-152	3.40E-04	3.75E-03	1.89E-06	--	3.15E-04	--	3.90E-04	--	--	--	1.29E+00	--	1.16E-04	**1.30E+00**
Eu-154	5.40E-02	5.11E+00	1.05E-04	--	4.07E-04	--	3.73E-03	2.14E-04	--	--	1.64E+00	--	3.07E-02	**6.84E+00**
Eu-155	1.08E-02	3.51E-06	3.95E-06	--	6.19E-02	--	--	5.31E-04	--	--	7.95E-01	--	2.06E-04	**8.68E-01**
Fe-55	2.00E-02	--	--	--	--	--	--	--	--	--	2.91E-06	--	--	**2.00E-02**
Fe-59	2.25E-08	--	--	--	--	--	--	--	--	--	4.31E-04	--	--	**4.31E-04**
Fr-221	3.83E-07	2.93E-06	1.87E-04	7.97E-03	1.26E-01	--	1.97E-03	4.25E-11	1.61E-12	8.51E-16	1.74E-03	5.21E-18	3.36E-03	**1.41E-01**
Fr-223	1.89E-10	1.30E-10	1.85E-08	6.55E-07	8.66E-03	--	1.41E-04	7.96E-12	3.52E-12	--	2.89E-09	1.35E-17	2.38E-04	**9.04E-03**
Gd-152	6.26E-19	1.41E-18	--	--	2.31E-18	--	1.47E-18	--	--	--	7.07E-16	--	1.81E-18	**7.15E-16**
H-3	8.29E-03	1.16E-04	--	--	9.30E+03	--	--	--	--	--	9.69E-03	--	4.13E-03	**9.30E+03**
Ho-166m	2.17E-09	--	--	--	--	--	--	--	--	--	--	--	1.36E-05	**1.36E-05**
I-125	--	--	--	--	5.65E-06	--	--	--	--	--	--	--	--	**5.65E-06**
I-129	7.38E-07	1.58E-06	--	--	1.20E-06	--	--	--	--	--	--	--	3.93E-03	**3.94E-03**
I-131	--	--	--	--	--	--	--	--	--	--	2.03E-03	--	--	**2.03E-03**
K-40	4.73E-04	3.91E-04	--	--	--	--	6.79E-08	--	--	--	4.26E-05	4.98E-10	--	**9.06E-04**
Kr-85	2.37E-02	1.84E+00	--	--	5.02E-01	--	--	--	--	--	--	--	4.29E-02	**2.40E+00**
Mn-54	5.55E-04	4.90E-08	--	--	1.89E-08	--	--	--	--	--	6.94E-16	--	--	**5.55E-04**
Mn-56	--	--	--	--	5.09E-07	--	--	--	--	--	--	--	--	**5.09E-07**
Na-22	2.95E-04	1.41E-02	--	--	6.57E-04	--	3.51E-05	--	--	--	7.33E-06	--	3.86E-04	**1.54E-02**
Nb-93m	2.26E-03	--	--	--	--	--	--	--	--	--	--	--	--	**2.26E-03**
Nb-94	5.94E-06	1.18E-03	--	--	--	--	2.59E-08	--	--	--	--	--	4.61E-07	**1.18E-03**
Nb-95	9.79E-08	--	2.46E-10	--	--	--	--	4.81E-08	--	--	9.27E-02	--	--	**9.27E-02**
Nb-95m	5.26E-10	--	1.32E-12	--	--	--	--	2.57E-10	--	--	--	--	--	**7.84E-10**
Nd-144	2.42E-18	--	--	--	1.41E-18	--	--	5.86E-19	--	--	2.80E-45	--	1.74E-18	**6.15E-18**
Ni-59	--	--	--	--	--	--	--	--	--	--	--	--	1.32E-05	**1.32E-05**
Ni-63	9.37E-06	--	--	--	--	--	--	--	--	--	1.64E-01	--	--	**1.64E-01**
Np-237	4.68E-02	7.39E-01	8.28E-01	2.29E-03	3.77E-01	1.72E-02	1.91E-02	5.56E-02	9.12E-05	3.33E-06	7.96E-01	8.36E-08	1.09E+00	**3.97E+00**
Np-238	3.02E-06	9.04E-05	--	--	--	--	3.57E-02	--	--	--	9.58E-07	--	5.45E-04	**3.63E-02**
Np-239	1.17E+00	7.58E-02	2.12E-02	--	1.00E+00	--	2.41E-01	1.23E-01	--	--	2.22E+00	--	6.16E+00	**1.10E+01**
Np-240	4.44E-09	--	--	--	5.20E-09	--	3.40E-13	--	--	--	6.95E-07	--	6.24E-16	**7.04E-07**
Np-240m	3.70E-06	--	--	--	4.34E-06	--	2.83E-10	--	--	--	5.79E-04	--	5.20E-13	**5.87E-04**
P-32	9.07E-12	--	--	--	--	--	--	--	--	--	--	--	--	**9.07E-12**
Pa-231	1.11E-07	2.80E-07	7.43E-06	3.64E-04	3.24E-03	--	5.65E-02	1.85E-08	4.15E-09	--	3.85E-01	9.29E-14	8.84E-03	**4.54E-01**
Pa-233	4.68E-02	9.68E-02	7.39E-01	2.29E-03	3.77E-01	--	1.91E-02	5.56E-02	9.12E-05	3.33E-06	2.38E-01	8.36E-08	1.09E+00	**2.67E+00**
Pa-234	8.33E-07	1.39E-04	3.19E-03	3.21E-04	6.31E-04	--	1.99E-05	2.59E-08	3.22E-06	--	4.30E-05	1.44E-17	1.12E-04	**4.46E-03**
Pa-234m	6.41E-04	1.07E-01	2.46E+00	2.47E-01	4.85E-01	--	1.53E-02	1.99E-05	2.48E-03	--	3.31E-02	1.11E-14	8.60E-02	**3.43E+00**
Pb-209	3.83E-07	2.93E-06	1.87E-04	7.97E-03	1.26E-01	--	1.97E-03	4.25E-11	1.61E-12	8.51E-16	1.74E-03	5.21E-18	3.36E-03	**1.41E-01**
Pb-210	8.90E-05	5.66E-05	1.51E-06	7.76E-04	2.95E-04	--	7.37E-09	1.24E-10	9.16E-12	--	3.00E-01	4.01E-18	2.48E-04	**3.02E-01**
Pb-211	1.37E-08	9.42E-09	1.34E-06	4.75E-05	6.29E-01	--	1.02E-02	5.77E-10	2.55E-10	--	2.10E-07	9.78E-16	1.73E-02	**6.57E-01**
Pb-212	7.67E-04	1.52E-04	2.42E-03	4.68E-01	6.86E-04	--	2.68E-03	3.22E-04	1.64E-16	--	3.02E-02	5.09E-21	2.34E-01	**7.39E-01**

Table 3-10. Total CH Radionuclide Activity (Ci) on a Site Basis Decayed through 2011

Continued

Radionuclide	ANLE	Hanford	INL	KAPL-NFS	LANL	LBNL	LLNL	MFC	NNSS	NRD	ORNL	SNL	SRS	Grand Total
Pb-214	3.53E-04	1.88E-03	1.25E-05	6.08E-03	3.50E-04	--	2.44E-07	4.15E-09	2.27E-10	--	5.40E-01	5.27E-16	4.83E-04	**5.49E-01**
Pd-107	1.84E-05	--	--	--	--	--	--	--	--	--	--	--	--	**1.84E-05**
Pm-147	8.95E-01	1.94E+01	--	--	6.12E-02	--	--	--	--	--	4.73E+00	--	8.47E-04	**2.51E+01**
Po-210	1.86E-04	3.01E-05	1.51E-06	7.76E-04	1.14E-04	--	4.39E-09	7.37E-11	9.16E-12	--	1.61E+00	1.09E-18	2.48E-04	**1.61E+00**
Po-211	3.77E-11	2.59E-11	3.68E-09	1.31E-07	1.73E-03	--	2.81E-05	1.59E-12	7.02E-13	--	5.77E-10	2.69E-18	4.75E-05	**1.81E-03**
Po-212	4.91E-04	9.73E-05	1.55E-03	3.00E-01	4.39E-04	--	1.72E-03	2.06E-04	1.05E-16	--	3.52E-06	3.26E-21	1.50E-01	**4.54E-01**
Po-213	3.74E-07	2.87E-06	1.83E-04	7.80E-03	1.23E-01	--	1.93E-03	4.16E-11	1.57E-12	8.33E-16	1.71E-03	5.10E-18	3.29E-03	**1.38E-01**
Po-214	3.53E-04	1.88E-03	1.25E-05	6.08E-03	3.50E-04	--	2.44E-07	4.15E-09	2.27E-10	--	5.39E-01	5.27E-16	4.83E-04	**5.48E-01**
Po-215	1.37E-08	9.42E-09	1.34E-06	4.75E-05	6.29E-01	--	1.02E-02	5.77E-10	2.55E-10	--	2.10E-07	9.78E-16	1.73E-02	**6.57E-01**
Po-216	7.67E-04	1.52E-04	2.42E-03	4.68E-01	6.86E-04	--	2.68E-03	3.22E-04	1.64E-16	--	5.50E-06	5.09E-21	2.34E-01	**7.09E-01**
Po-218	3.53E-04	1.88E-03	1.25E-05	6.08E-03	3.50E-04	--	2.44E-07	4.15E-09	2.27E-10	--	5.39E-01	5.27E-16	4.83E-04	**5.48E-01**
Pr-144	4.53E-03	--	--	--	2.56E-04	--	--	3.20E-04	--	--	--	--	3.68E-11	**5.10E-03**
Pr-144m	6.33E-05	--	--	--	3.59E-06	--	--	4.47E-06	--	--	--	--	5.16E-13	**7.14E-05**
Pu-236	2.08E-09	--	8.10E-06	--	4.31E-09	--	--	--	--	--	1.80E-13	--	--	**8.11E-06**
Pu-238	4.81E+00	1.76E+04	2.04E+03	8.73E+01	1.25E+05	--	1.69E+03	1.09E+00	5.38E+00	--	3.97E+03	2.80E-01	3.89E+04	**1.89E+05**
Pu-239	1.25E+01	8.29E+04	1.13E+04	2.81E+03	3.74E+04	7.26E-01	1.89E+03	2.32E+01	1.77E+02	--	6.81E+02	8.92E+00	1.11E+04	**1.48E+05**
Pu-240	9.07E+00	3.17E+04	2.84E+03	2.81E+03	9.86E+03	2.00E-02	5.49E+02	6.21E+00	4.05E+01	--	8.54E+02	2.11E+00	3.79E+03	**5.24E+04**
Pu-241	3.38E+01	5.31E+05	1.93E+04	2.70E+03	1.35E+05	5.14E-01	6.20E+03	1.05E+03	2.42E+02	--	7.93E+04	1.40E+01	2.35E+04	**7.98E+05**
Pu-242	2.08E-02	1.59E+03	3.93E-01	--	1.51E+01	--	1.70E-01	1.23E-03	2.61E-03	--	2.33E+00	7.16E-05	1.02E+00	**1.61E+03**
Pu-243	1.02E-09	--	--	--	--	--	3.52E-06	--	--	--	--	--	1.09E-02	**1.09E-02**
Pu-244	3.71E-06	2.27E-11	--	--	1.79E-04	--	2.84E-10	--	--	--	9.95E-03	--	5.20E-13	**1.01E-02**
Ra-223	1.37E-08	9.42E-09	1.34E-06	4.75E-05	6.29E-01	--	1.02E-02	5.77E-10	2.55E-10	--	6.60E-03	9.78E-16	1.73E-02	**6.63E-01**
Ra-224	7.67E-04	1.52E-04	2.42E-03	4.68E-01	6.86E-04	--	2.68E-03	3.22E-04	1.64E-16	--	5.50E-06	5.09E-21	2.34E-01	**7.09E-01**
Ra-225	3.83E-07	2.93E-06	1.87E-04	7.97E-03	1.26E-01	--	1.97E-03	4.25E-11	1.61E-12	8.51E-16	1.74E-03	5.21E-18	3.36E-03	**1.41E-01**
Ra-226	3.53E-04	4.84E-03	6.32E-05	6.08E-03	3.52E-04	--	2.44E-07	4.15E-09	2.27E-10	--	5.48E-01	5.27E-16	4.83E-04	**5.60E-01**
Ra-228	1.10E-06	1.45E-05	2.57E-04	3.45E-01	1.04E-03	--	3.14E-06	7.85E-10	3.65E-16	--	4.34E-06	6.00E-20	1.20E-01	**4.66E-01**
Rb-87	1.24E-10	--	--	--	--	--	--	--	--	--	--	--	--	**1.24E-10**
Rh-106	8.35E-03	--	--	--	4.35E-03	--	--	4.41E-04	--	--	3.16E-11	--	7.45E-08	**1.31E-02**
Rn-219	1.37E-08	9.42E-09	1.34E-06	4.75E-05	6.29E-01	--	1.02E-02	5.77E-10	2.55E-10	--	2.10E-07	9.78E-16	1.73E-02	**6.57E-01**
Rn-220	7.67E-04	1.52E-04	2.42E-03	4.68E-01	6.86E-04	--	2.68E-03	3.22E-04	1.64E-16	--	5.50E-06	5.09E-21	2.34E-01	**7.09E-01**
Rn-222	3.53E-04	1.88E-03	1.25E-05	6.08E-03	3.50E-04	--	2.44E-07	4.15E-09	2.27E-10	--	5.39E-01	5.27E-16	4.83E-04	**5.48E-01**
Ru-103	--	--	--	--	--	--	--	--	--	--	1.27E+00	--	--	**1.27E+00**
Ru-106	8.35E-03	--	--	--	4.35E-03	--	--	4.41E-04	--	--	5.32E+00	--	7.45E-08	**5.34E+00**
S-35	2.56E-04	--	--	--	--	--	--	--	--	--	--	--	--	**2.56E-04**
Sb-125	2.47E-03	1.26E+00	--	--	4.53E-02	--	2.69E-06	--	--	--	2.89E-01	--	4.20E-04	**1.59E+00**
Sb-126	2.57E-06	1.46E-01	--	--	1.79E-05	--	--	--	--	--	--	--	6.71E-07	**1.46E-01**
Sb-126m	1.83E-05	1.04E+00	--	--	1.28E-04	--	--	--	--	--	--	--	4.80E-06	**1.04E+00**
Sc-46	--	--	--	--	3.19E-09	--	--	--	--	--	--	--	--	**3.19E-09**
Se-79	6.32E-06	--	--	--	--	--	--	--	--	--	--	--	9.73E-06	**1.60E-05**
Sm-147	6.70E-12	3.34E-10	--	--	1.83E-12	--	--	--	--	--	--	--	5.36E-12	**3.48E-10**
Sm-148	2.76E-35	1.25E-34	--	--	4.01E-34	--	1.31E-34	--	--	--	9.80E-31	--	1.20E-33	**9.82E-31**
Sm-151	3.21E-03	1.58E+00	--	--	1.01E-03	--	--	--	--	--	5.76E+00	--	2.73E-02	**7.38E+00**
Sn-121	--	--	--	--	5.79E-04	--	--	--	--	--	--	--	--	**5.79E-04**
Sn-121m	--	--	--	--	7.46E-04	--	--	--	--	--	--	--	--	**7.46E-04**
Sn-126	1.83E-05	1.04E+00	--	--	1.28E-04	--	--	--	--	--	--	--	4.80E-06	**1.04E+00**
Sr-85	1.75E-06	--	--	--	--	--	--	--	--	--	--	--	--	**1.75E-06**
Sr-90	2.97E+00	3.80E+03	7.79E-02	--	4.71E+00	--	8.29E-01	7.56E-02	--	--	4.40E+01	--	4.17E+00	**3.86E+03**

Table 3-10. Total CH Radionuclide Activity (Ci) on a Site Basis Decayed through 2011

Continued

Radionuclide	ANLE	Hanford	INL	KAPL-NFS	LANL	LBNL	LLNL	MFC	NNSS	NRD	ORNL	SNL	SRS	Grand Total
Tc-99	3.71E-03	2.10E+00	--	1.74E+01	--	--	--	--	--	--	2.03E+01	--	1.49E-04	**3.97E+01**
Te-123	--	--	--	--	--	--	--	--	--	--	1.13E-03	--	--	**1.13E-03**
Te-123m	--	--	--	--	--	--	--	--	--	--	6.14E-04	--	--	**6.14E-04**
Te-125m	5.92E-04	3.07E-01	--	--	1.11E-02	--	6.56E-07	--	--	--	--	--	1.03E-04	**3.19E-01**
Th-227	1.35E-08	9.29E-09	1.32E-06	4.68E-05	6.20E-01	--	1.01E-02	5.69E-10	2.52E-10	--	7.65E-03	9.65E-16	1.70E-02	**6.55E-01**
Th-228	7.63E-04	5.64E-04	2.42E-03	4.67E-01	6.85E-04	--	2.68E-03	3.22E-04	1.64E-16	--	3.10E-02	5.09E-21	2.34E-01	**7.40E-01**
Th-229	3.83E-07	2.93E-06	1.87E-04	7.97E-03	1.26E-01	--	1.97E-03	4.25E-11	1.61E-12	8.51E-16	6.18E-02	5.21E-18	3.36E-03	**2.01E-01**
Th-230	3.77E-03	4.70E-06	1.78E-05	1.56E+00	2.19E-03	--	2.83E-04	4.93E-06	2.61E-07	--	5.22E-02	3.65E-12	2.60E-03	**1.62E+00**
Th-231	8.74E-05	7.29E-03	5.50E-02	1.91E+00	5.85E-02	--	3.65E-03	4.37E-04	4.92E-05	--	1.19E-03	8.78E-09	8.06E-03	**2.04E+00**
Th-232	5.23E-06	3.08E-03	2.77E-04	5.21E-01	2.71E-03	1.12E-03	1.46E-05	3.66E-09	1.48E-15	--	1.91E-03	1.54E-18	1.21E-01	**6.51E-01**
Th-234	6.41E-04	1.07E-01	2.46E+00	2.47E-01	4.87E-01	--	1.53E-02	1.99E-05	2.48E-03	--	3.53E-02	1.11E-14	8.60E-02	**3.44E+00**
Tl-204	1.42E-04	--	--	--	--	--	--	--	--	--	4.25E-07	--	--	**1.42E-04**
Tl-207	1.37E-08	9.40E-09	1.34E-06	4.73E-05	6.27E-01	--	1.02E-02	5.75E-10	2.54E-10	--	2.09E-07	9.76E-16	1.72E-02	**6.55E-01**
Tl-208	2.76E-04	5.46E-05	8.70E-04	1.68E-01	2.46E-04	--	9.64E-04	1.16E-04	5.91E-17	--	8.62E-03	1.83E-21	8.42E-02	**2.64E-01**
Tl-209	8.03E-09	6.15E-08	3.93E-06	1.67E-04	2.64E-03	--	4.14E-05	8.93E-13	3.37E-14	1.79E-17	3.66E-05	1.09E-19	7.06E-05	**2.96E-03**
Tm-171	2.57E-09	--	--	--	9.72E-04	--	--	--	--	--	--	--	--	**9.72E-04**
U-232	2.49E-04	3.33E-01	2.84E-03	--	2.04E-04	--	4.85E-03	6.18E-04	--	--	7.63E-02	--	1.12E-01	**5.31E-01**
U-233	2.98E-03	4.05E+00	4.96E-01	1.01E+01	4.26E+01	--	2.61E+00	4.84E-07	4.70E-09	1.45E-11	1.04E+01	1.79E-13	1.47E+00	**7.17E+01**
U-234	6.16E-03	3.22E+00	1.56E+00	1.01E+01	1.70E+01	--	6.82E-02	1.48E-02	7.10E-03	--	7.35E+00	7.93E-07	1.25E+01	**5.18E+01**
U-235	8.74E-05	1.08E-01	1.06E-01	1.91E+00	5.89E-02	--	3.65E-03	4.37E-04	4.92E-05	--	3.58E-03	8.78E-09	1.66E-02	**2.21E+00**
U-236	1.18E-05	1.25E-03	4.16E-04	1.91E+00	2.65E-03	--	3.29E-05	7.15E-05	8.20E-06	--	1.37E-01	6.23E-08	3.96E-03	**2.06E+00**
U-237	8.08E-04	3.21E-01	3.39E-01	6.46E-02	3.21E+00	--	1.48E-01	2.51E-02	5.79E-03	--	1.05E-03	3.35E-04	1.75E-01	**4.29E+00**
U-238	6.41E-04	1.76E+00	7.09E+00	2.47E-01	4.87E-01	7.80E-07	1.53E-02	1.99E-05	2.48E-03	--	5.14E-02	1.11E-14	8.61E-02	**9.74E+00**
U-240	3.70E-06	--	--	--	4.34E-06	--	2.83E-10	--	--	--	5.79E-04	--	5.20E-13	**5.87E-04**
Xe-133	3.12E-29	--	--	--	--	--	--	--	--	--	--	--	--	**3.12E-29**
Y-90	2.97E+00	3.72E+03	5.23E-03	--	4.70E+00	--	8.29E-01	7.56E-02	--	--	6.66E-02	--	4.18E+00	**3.74E+03**
Zn-65	3.54E-07	--	--	--	--	--	--	--	--	--	--	--	--	**3.54E-07**
Zr-93	1.01E-05	--	--	--	--	--	--	--	--	--	--	--	--	**1.01E-05**
Zr-95	4.47E-08	--	1.12E-10	--	--	--	--	2.19E-08	--	--	7.12E-01	--	--	**7.12E-01**
Grand Total	**3.29E+02**	**7.36E+05**	**6.94E+04**	**9.26E+03**	**3.81E+05**	**5.51E+00**	**1.29E+04**	**1.16E+03**	**4.80E+02**	**3.32E+02**	**9.10E+04**	**2.56E+01**	**1.56E+05**	**1.46E+06**

Data Source: CID Data Version D.11.00 (LANL-CO 2012). Note: This table contains data for WIPP-bound waste streams only; it does not include data for emplaced or potential waste streams.

Table 3-11. Total RH Radionuclide Activity (Ci) on a Site Basis Decayed through 2011

Radionuclide	ANLE	BAPL	Hanford	INL	KAPL-S	LANL	MFC	ORNL	SNL	SRS	Grand Total
Ac-225	5.27E-03	7.31E-05	2.11E-04	1.00E-03	--	1.49E-12	3.27E-09	8.69E-01	--	1.70E-05	**8.76E-01**
Ac-227	2.35E-01	7.62E-05	9.33E-03	3.72E-06	2.22E-09	1.68E-06	1.02E-03	4.50E-03	--	1.15E-08	**2.49E-01**
Ac-228	2.04E-02	2.07E-06	6.13E-06	4.07E-05	--	8.99E-15	1.85E-13	9.93E-03	--	3.95E-13	**3.04E-02**
Ag-108	1.10E-03	--	--	--	--	--	--	--	--	--	**1.10E-03**
Ag-108m	1.26E-02	--	--	--	--	--	--	--	--	--	**1.26E-02**
Ag-109m	1.57E-01	--	--	--	--	--	--	6.31E-08	--	--	**1.57E-01**
Ag-110	1.58E-04	--	2.64E-07	--	--	--	--	8.46E-15	--	--	**1.58E-04**
Ag-110m	1.16E-02	--	1.94E-05	--	--	--	--	6.22E-13	--	--	**1.16E-02**
Am-241	1.54E+02	8.98E-02	4.10E+03	1.43E+01	1.14E-02	4.62E+00	2.32E+02	1.69E+02	8.95E-01	2.89E+02	**4.96E+03**
Am-242	5.37E-01	1.46E-07	1.23E+00	2.55E-04	--	--	--	4.82E-03	--	8.13E-02	**1.85E+00**
Am-242m	5.39E-01	4.84E-06	1.23E+00	2.56E-04	--	--	--	4.84E-03	1.78E-03	8.16E-02	**1.86E+00**
Am-243	3.04E+00	3.86E-04	4.01E+00	6.89E-04	2.49E-06	--	1.96E-04	1.10E+00	6.72E-05	3.50E+00	**1.17E+01**
Am-245	6.15E-13	--	--	--	--	--	--	8.78E-16	--	--	**6.16E-13**
Ar-37	6.43E-16	--	--	--	--	--	--	--	--	--	**6.43E-16**
Ar-39	8.80E-03	--	--	--	--	--	--	--	--	--	**8.80E-03**
Ar-42	2.26E-02	--	--	--	--	--	--	--	--	--	**2.26E-02**
At-217	5.27E-03	7.31E-05	2.11E-04	1.00E-03	--	1.49E-12	3.27E-09	8.69E-01	--	1.70E-05	**8.76E-01**
Ba-133	1.71E+00	3.47E-10	--	--	--	--	--	--	--	--	**1.71E+00**
Ba-137m	2.95E+03	2.00E+02	2.17E+05	2.83E+04	2.84E+01	7.79E+02	2.90E+04	2.15E+03	--	8.43E+01	**2.80E+05**
Bi-210	8.07E-01	6.28E-09	2.34E-10	1.23E-08	--	7.19E-10	8.31E-08	6.97E+00	--	1.03E-08	**7.77E+00**
Bi-211	2.35E-01	--	2.26E-06	3.72E-06	--	1.68E-06	1.02E-03	4.50E-03	--	1.15E-08	**2.41E-01**
Bi-212	2.42E+00	2.66E-02	2.08E-05	3.60E-02	--	8.99E-15	9.98E-14	1.79E+00	--	2.88E-13	**4.28E+00**
Bi-213	5.27E-03	7.31E-05	2.11E-04	1.00E-03	--	1.49E-12	3.27E-09	8.69E-01	--	1.70E-05	**8.76E-01**
Bi-214	3.14E-08	1.06E-08	5.85E-09	1.02E-07	--	3.05E-09	1.07E-06	1.25E+01	--	6.20E-08	**1.25E+01**
Bk-249	4.24E-08	--	--	--	--	--	--	6.05E-11	--	--	**4.24E-08**
Bk-250	--	--	--	--	--	--	--	5.70E-09	--	--	**5.70E-09**
C-14	--	5.12E-03	4.41E-04	9.34E+01	1.48E-01	--	3.58E+01	1.09E-03	--	6.69E-05	**1.29E+02**
Ca-45	2.40E-04	--	--	--	--	--	--	--	--	--	**2.40E-04**
Cd-109	1.57E-01	--	--	--	--	--	--	6.31E-08	--	--	**1.57E-01**
Cd-113	3.75E-19	--	1.84E-19	--	--	--	--	--	--	--	**5.58E-19**
Cd-113m	8.12E-01	3.93E-05	1.71E+00	--	--	--	--	--	--	--	**2.53E+00**
Cd-115m	1.32E-11	--	--	--	--	--	--	--	--	--	**1.32E-11**
Ce-139	7.93E-04	--	--	--	--	--	--	--	--	--	**7.93E-04**
Ce-141	1.16E-14	--	--	--	--	--	7.78E-07	--	--	--	**7.78E-07**
Ce-144	1.61E+00	6.53E-10	9.95E-03	2.61E-02	--	6.40E-11	2.85E+01	1.56E-10	--	2.38E-04	**3.01E+01**
Cf-249	6.58E-01	--	--	--	1.89E-13	--	--	2.21E-01	--	5.08E-06	**8.79E-01**
Cf-250	7.20E-02	--	--	--	--	--	--	5.46E-01	--	6.52E-05	**6.18E-01**
Cf-251	8.04E-09	--	--	--	2.38E-15	--	--	3.06E-02	--	1.99E-06	**3.06E-02**
Cf-252	3.34E-04	--	--	--	1.15E-16	--	--	1.66E-02	--	1.02E-01	**1.19E-01**
Cm-242	4.45E-01	4.00E-06	1.43E+00	2.11E-04	5.11E-05	--	4.96E-12	3.99E-03	1.47E-03	6.72E-02	**1.95E+00**
Cm-243	5.49E-01	8.35E-06	2.93E+01	6.70E-03	7.44E-05	--	--	1.95E-02	--	6.84E-03	**2.99E+01**
Cm-244	1.72E+02	4.14E-04	7.84E+02	1.71E+00	6.96E-03	--	4.30E-06	4.39E+02	--	3.18E+02	**1.72E+03**
Cm-245	1.58E-02	6.21E-10	8.82E-02	--	2.30E-08	--	--	2.86E-03	--	4.31E-02	**1.50E-01**
Cm-246	4.70E-05	--	3.94E-02	--	3.00E-09	--	--	2.65E+00	--	5.77E-02	**2.74E+00**
Cm-247	6.24E-10	--	1.24E-10	--	7.07E-15	--	--	6.77E-08	--	1.09E-07	**1.78E-07**
Cm-248	4.66E-09	--	1.88E-06	1.57E-16	1.40E-14	--	--	9.45E-03	--	2.00E-05	**9.48E-03**
Cm-250	--	--	--	--	--	--	--	4.07E-08	--	--	**4.07E-08**
Co-58	3.63E-07	--	--	--	--	--	1.34E+01	--	--	--	**1.34E+01**

Table 3-11. Total RH Radionuclide Activity (Ci) on a Site Basis Decayed through 2011
Continued

Radionuclide	ANLE	BAPL	Hanford	INL	KAPL-S	LANL	MFC	ORNL	SNL	SRS	Grand Total
Co-60	2.85E+01	2.90E+00	1.46E+02	3.30E+02	2.96E+00	5.13E-01	4.00E+04	2.02E+00	2.00E+01	1.23E-03	**4.05E+04**
Cr-51	1.08E-17	--	--	--	--	--	--	--	--	--	**1.08E-17**
Cs-134	2.16E+01	3.84E-01	1.18E+03	2.59E+00	--	--	4.07E+01	1.09E-02	8.29E-03	5.25E-01	**1.24E+03**
Cs-135	8.37E-08	6.32E-06	6.32E-04	2.83E-03	1.90E-05	--	1.74E+01	--	--	--	**1.74E+01**
Cs-137	3.12E+03	2.11E+02	2.30E+05	3.00E+04	3.00E+01	8.25E+02	3.08E+04	2.27E+03	3.17E+01	8.93E+01	**2.97E+05**
Dy-159	1.26E-04	--	--	--	--	--	--	--	--	--	**1.26E-04**
Es-254	--	--	--	--	--	--	--	4.30E-14	--	--	**4.30E-14**
Eu-149	1.83E-06	--	--	--	--	--	--	--	--	--	**1.83E-06**
Eu-152	7.74E-01	2.09E+01	2.48E+00	9.62E-07	--	--	--	1.61E+01	--	--	**4.02E+01**
Eu-154	6.19E+01	9.66E+00	8.83E+02	8.31E+00	--	8.24E-03	6.64E+00	8.18E+00	8.85E-02	1.69E+00	**9.80E+02**
Eu-155	2.79E+00	2.83E-01	6.07E+02	5.65E+00	--	8.64E-03	4.65E+01	1.28E-01	--	3.71E-02	**6.62E+02**
Fe-55	2.53E+01	2.47E-01	5.14E-02	7.30E+00	1.77E+01	--	1.15E+04	--	--	--	**1.15E+04**
Fe-59	4.13E-12	--	--	--	--	--	--	--	--	--	**4.13E-12**
Fr-221	5.27E-03	7.31E-05	2.11E-04	1.00E-03	--	1.49E-12	3.27E-09	8.69E-01	--	1.70E-05	**8.76E-01**
Fr-223	3.24E-03	--	3.12E-08	5.14E-08	--	2.31E-08	1.41E-05	6.21E-05	--	1.58E-10	**3.31E-03**
Gd-152	6.17E-15	--	8.89E-15	3.92E-20	--	--	--	1.59E-12	--	--	**1.60E-12**
Gd-153	4.51E-03	--	1.96E-07	--	--	--	--	--	--	--	**4.51E-03**
H-3	1.39E+01	5.77E-01	9.76E+02	2.50E-01	9.00E-02	--	1.10E-04	--	1.07E-03	1.85E-01	**9.91E+02**
Hf-175	2.78E-08	--	--	--	--	--	--	--	--	--	**2.78E-08**
Hf-181	9.26E-14	--	--	--	--	--	--	--	--	--	**9.26E-14**
Ho-166m	--	1.43E-10	--	--	--	--	--	--	--	--	**1.43E-10**
I-125	1.29E-08	--	--	--	--	--	--	--	--	--	**1.29E-08**
I-129	9.10E-07	6.85E-05	2.42E-03	2.06E-02	1.51E-05	--	9.22E-02	1.75E-06	--	3.02E-02	**1.46E-01**
In-113m	2.93E-05	--	--	--	--	--	--	--	--	--	**2.93E-05**
In-114	2.72E-11	--	--	--	--	--	--	--	--	--	**2.72E-11**
In-114m	2.84E-11	--	--	--	--	--	--	--	--	--	**2.84E-11**
In-115	2.67E-17	--	--	--	--	--	--	--	--	--	**2.67E-17**
In-115m	1.46E-15	--	--	--	--	--	--	--	--	--	**1.46E-15**
Ir-194	8.15E-03	--	--	--	--	--	--	--	--	--	**8.15E-03**
K-42	2.26E-02	--	--	--	--	--	--	--	--	--	**2.26E-02**
Kr-85	7.45E+01	1.04E+01	4.79E+02	6.09E+00	1.13E+00	1.02E+02	--	--	--	2.49E+00	**6.76E+02**
Lu-177m	3.86E-06	--	--	--	--	--	--	--	--	--	**3.86E-06**
Mn-54	3.93E-01	--	4.83E+01	3.36E-02	--	--	3.52E+03	--	--	--	**3.57E+03**
Mo-93	--	--	1.25E-04	2.11E-02	--	--	--	--	--	--	**2.12E-02**
Na-22	1.25E-02	--	1.86E-04	9.71E-08	--	--	--	9.31E-09	--	--	**1.27E-02**
Nb-91	1.44E-02	--	--	--	--	--	--	--	--	--	**1.44E-02**
Nb-93m	4.20E-01	7.92E-03	3.19E-04	8.24E-03	--	--	--	--	--	--	**4.36E-01**
Nb-94	--	1.32E-08	8.47E-02	4.84E-03	9.00E-03	--	5.65E-01	--	--	--	**6.64E-01**
Nb-95	2.47E-06	--	--	--	--	--	--	--	--	--	**2.47E-06**
Nb-95m	1.32E-08	--	--	--	--	--	--	--	--	--	**1.32E-08**
Nd-144	2.04E-14	--	1.74E-14	5.97E-12	--	1.52E-15	8.87E-12	6.27E-16	--	6.87E-17	**1.49E-11**
Ni-59	1.17E-02	3.35E-01	8.44E-04	9.33E+02	5.91E-02	--	3.45E+02	--	--	1.33E-04	**1.28E+03**
Ni-63	2.74E+01	2.74E+01	3.04E-02	8.57E+00	8.87E+00	--	7.62E+02	--	--	--	**8.35E+02**
Np-235	1.10E-01	--	--	--	--	--	--	--	--	--	**1.10E-01**
Np-237	4.59E-03	5.51E-04	2.21E-01	1.63E-03	8.71E-05	3.48E-05	1.03E-01	2.68E-02	3.32E-06	2.10E+00	**2.46E+00**
Np-238	2.43E-03	--	5.55E-03	1.15E-06	--	--	--	2.18E-05	--	3.67E-04	**8.37E-03**
Np-239	3.04E+00	1.82E-05	3.85E+00	6.89E-04	--	--	1.96E-04	1.10E+00	--	3.50E+00	**1.15E+01**
Np-240	1.04E-19	--	2.79E-09	2.24E-26	--	--	--	4.55E-09	--	1.24E-15	**7.34E-09**

Table 3-11. Total RH Radionuclide Activity (Ci) on a Site Basis Decayed through 2011
Continued

Radionuclide	ANLE	BAPL	Hanford	INL	KAPL-S	LANL	MFC	ORNL	SNL	SRS	Grand Total
Np-240m	8.67E-17	--	2.32E-06	1.87E-23	--	--	--	3.79E-06	--	1.03E-12	**6.12E-06**
Os-185	4.39E-08	--	--	--	--	--	--	--	--	--	**4.39E-08**
Os-194	8.15E-03	--	--	--	--	--	--	--	--	--	**8.15E-03**
Pa-231	3.27E-07	1.22E-04	1.32E-05	1.82E-05	4.52E-09	4.95E-06	9.85E-03	7.22E-03	--	6.43E-08	**1.72E-02**
Pa-233	4.59E-03	1.22E-07	1.05E-01	1.63E-03	--	3.48E-05	1.03E-01	2.68E-02	3.32E-06	2.10E+00	**2.35E+00**
Pa-234	8.72E-05	4.51E-11	1.42E-04	3.13E-04	7.44E-11	5.36E-08	1.09E-02	1.60E-05	--	4.16E-06	**1.14E-02**
Pa-234m	6.71E-02	7.13E-08	1.09E-01	2.41E-01	4.65E-08	4.12E-05	8.36E+00	1.23E-02	--	3.20E-03	**8.79E+00**
Pb-209	5.27E-03	7.31E-05	2.11E-04	1.00E-03	--	1.49E-12	3.27E-09	8.69E-01	--	1.70E-05	**8.76E-01**
Pb-210	8.07E-01	6.28E-09	9.73E-03	1.23E-08	1.09E-10	7.19E-10	8.31E-08	6.97E+00	--	1.03E-08	**7.78E+00**
Pb-211	2.35E-01	--	2.26E-06	3.72E-06	--	1.68E-06	1.02E-03	4.50E-03	--	1.15E-08	**2.41E-01**
Pb-212	2.42E+00	2.66E-02	2.08E-05	3.60E-02	--	8.99E-15	9.98E-14	1.79E+00	--	2.88E-13	**4.28E+00**
Pb-214	3.14E-08	1.06E-08	5.85E-09	1.02E-07	--	3.05E-09	1.07E-06	1.25E+01	--	6.20E-08	**1.25E+01**
Pd-107	2.33E-06	1.93E-07	8.64E-05	--	7.97E-07	--	--	--	--	--	**8.97E-05**
Pm-145	5.16E-01	--	--	--	--	--	--	--	--	--	**5.16E-01**
Pm-146	4.71E-01	--	--	--	--	--	--	--	--	--	**4.71E-01**
Pm-147	3.74E+01	2.59E+00	5.01E+01	4.80E+00	3.64E-03	--	--	2.02E-02	8.00E-02	8.03E-01	**9.57E+01**
Pm-148	8.36E-15	--	--	--	--	--	--	--	--	--	**8.36E-15**
Pm-148m	1.58E-13	--	--	--	--	--	--	--	--	--	**1.58E-13**
Po-210	8.08E-01	6.28E-09	9.73E-03	1.21E-08	--	7.19E-10	8.31E-08	6.97E+00	--	1.03E-08	**7.79E+00**
Po-211	6.47E-04	--	6.22E-09	1.02E-08	--	4.61E-09	2.81E-06	1.24E-05	--	3.15E-11	**6.62E-04**
Po-212	1.55E+00	1.70E-02	1.33E-05	2.31E-02	--	5.76E-15	6.39E-14	1.15E+00	--	1.85E-13	**2.74E+00**
Po-213	5.16E-03	7.15E-05	2.07E-04	9.82E-04	--	1.46E-12	3.20E-09	8.51E-01	--	1.66E-05	**8.57E-01**
Po-214	3.14E-08	1.06E-08	5.85E-09	1.02E-07	--	3.05E-09	1.07E-06	1.25E+01	--	6.19E-08	**1.25E+01**
Po-215	2.35E-01	--	2.26E-06	3.72E-06	--	1.68E-06	1.02E-03	4.50E-03	--	1.15E-08	**2.41E-01**
Po-216	2.42E+00	2.66E-02	2.08E-05	3.60E-02	--	8.99E-15	9.98E-14	1.79E+00	--	2.88E-13	**4.28E+00**
Po-218	3.14E-08	1.06E-08	5.85E-09	1.02E-07	--	3.05E-09	1.07E-06	1.25E+01	--	6.20E-08	**1.25E+01**
Pr-144	1.61E+00	6.53E-10	9.95E-03	2.61E-02	--	6.40E-11	2.85E+01	1.56E-10	--	2.38E-04	**3.01E+01**
Pr-144m	2.25E-02	--	1.39E-04	3.65E-04	--	8.96E-13	3.99E-01	2.18E-12	--	3.33E-06	**4.22E-01**
Pu-236	2.25E-01	--	9.27E-06	6.75E-03	--	--	--	--	--	--	**2.32E-01**
Pu-238	1.41E+02	4.48E+00	1.84E+03	8.07E+02	5.00E-01	1.26E+00	1.02E+01	3.75E+02	3.45E-01	2.21E+03	**5.39E+03**
Pu-239	9.16E+01	3.69E-03	1.88E+03	4.47E+02	7.75E-04	9.37E+01	8.86E+02	2.75E+01	5.96E-01	2.47E+01	**3.45E+03**
Pu-240	5.88E+01	3.93E-04	5.49E+03	2.20E+02	6.24E-04	2.53E+00	3.86E+02	2.56E+01	4.21E-02	8.56E+00	**6.19E+03**
Pu-241	1.32E+03	7.77E-01	1.92E+04	9.43E+01	2.00E-01	2.37E+01	3.31E+01	8.66E+01	4.06E+00	2.04E+03	**2.28E+04**
Pu-242	7.15E-02	6.28E-05	6.44E+03	1.69E-01	3.94E-06	1.52E-03	1.07E-02	8.82E-02	3.60E-05	4.51E-03	**6.44E+03**
Pu-243	6.24E-10	--	1.24E-10	--	--	--	--	6.77E-08	--	1.09E-07	**1.78E-07**
Pu-244	8.68E-17	--	2.33E-06	1.87E-23	8.10E-14	--	--	3.80E-06	--	1.03E-12	**6.12E-06**
Ra-223	2.35E-01	--	2.26E-06	3.72E-06	--	1.68E-06	1.02E-03	4.50E-03	--	1.15E-08	**2.41E-01**
Ra-224	2.42E+00	2.66E-02	2.08E-05	3.60E-02	--	8.99E-15	9.98E-14	1.79E+00	--	2.88E-13	**4.28E+00**
Ra-225	5.27E-03	7.31E-05	2.11E-04	1.00E-03	--	1.49E-12	3.27E-09	8.69E-01	--	1.70E-05	**8.76E-01**
Ra-226	3.14E-08	1.06E-08	6.79E-02	1.02E-07	4.25E-10	3.05E-09	1.07E-06	1.25E+01	--	6.20E-08	**1.26E+01**
Ra-228	2.04E-02	2.07E-06	6.82E-06	4.07E-05	1.89E-12	8.99E-15	1.85E-13	9.93E-03	--	3.95E-13	**3.04E-02**
Rb-87	--	6.77E-10	--	--	--	--	--	--	--	--	**6.77E-10**
Re-188	1.39E-09	--	--	--	--	--	--	--	--	--	**1.39E-09**
Rh-102	6.08E-03	--	--	--	--	--	--	--	--	--	**6.08E-03**
Rh-103m	7.82E-12	--	--	--	--	--	--	--	--	--	**7.82E-12**
Rh-106	4.45E+00	2.12E-08	1.48E-01	8.06E-04	--	9.16E-08	7.07E+00	2.14E-07	--	3.01E-03	**1.17E+01**
Rn-219	2.35E-01	--	2.26E-06	3.72E-06	--	1.68E-06	1.02E-03	4.50E-03	--	1.15E-08	**2.41E-01**
Rn-220	2.42E+00	2.66E-02	2.08E-05	3.60E-02	--	8.99E-15	9.98E-14	1.79E+00	--	2.88E-13	**4.28E+00**

Table 3-11. Total RH Radionuclide Activity (Ci) on a Site Basis Decayed through 2011
Continued

Radionuclide	ANLE	BAPL	Hanford	INL	KAPL-S	LANL	MFC	ORNL	SNL	SRS	Grand Total
Rn-222	3.14E-08	1.06E-08	5.85E-09	1.02E-07	--	3.05E-09	1.07E-06	1.25E+01	--	6.20E-08	**1.25E+01**
Ru-103	7.84E-12	--	--	--	--	--	--	--	--	--	**7.84E-12**
Ru-106	4.45E+00	2.12E-08	1.48E-01	8.06E-04	--	9.16E-08	7.07E+00	2.14E-07	--	3.01E-03	**1.17E+01**
S-35	1.52E-07	--	--	--	--	--	--	--	--	--	**1.52E-07**
Sb-124	1.35E-08	--	--	--	--	--	1.03E-12	--	--	--	**1.35E-08**
Sb-125	2.21E+01	5.08E-02	2.60E+02	1.06E+00	--	4.01E-04	8.53E+00	8.17E-04	--	--	**2.92E+02**
Sb-126	6.00E-06	3.23E-06	1.16E-01	--	--	1.82E-02	--	--	--	--	**1.34E-01**
Sb-126m	4.29E-05	2.31E-05	8.28E-01	--	--	1.30E-01	--	--	--	--	**9.58E-01**
Sc-46	6.78E-07	--	--	--	--	--	--	--	--	--	**6.78E-07**
Se-75	2.18E-05	--	--	--	--	--	--	--	--	--	**2.18E-05**
Se-79	5.45E-06	6.42E-05	1.38E-01	--	4.88E-06	--	--	--	--	8.90E-04	**1.39E-01**
Sm-145	1.65E-02	--	--	--	--	--	--	--	--	--	**1.65E-02**
Sm-146	5.59E-09	--	--	--	--	--	--	--	--	--	**5.59E-09**
Sm-147	1.74E-09	--	1.35E-09	6.17E-09	--	--	--	4.80E-10	--	1.06E-10	**9.84E-09**
Sm-148	1.01E-19	--	8.02E-31	2.90E-35	--	--	--	2.20E-27	--	--	**1.01E-19**
Sm-151	1.85E+00	5.69E-01	3.45E+01	6.90E+00	5.50E-02	1.86E-02	1.33E+00	--	3.41E-02	7.14E-01	**4.60E+01**
Sn-113	2.93E-05	--	--	--	--	--	--	--	--	--	**2.93E-05**
Sn-119m	3.48E-02	--	8.52E-07	--	--	--	--	--	--	--	**3.48E-02**
Sn-121	3.79E-01	2.43E-05	3.07E-04	--	--	4.29E-01	--	--	--	--	**8.09E-01**
Sn-121m	4.89E-01	3.13E-05	3.95E-04	--	1.44E-04	5.53E-01	--	--	--	--	**1.04E+00**
Sn-123	4.52E-04	--	--	--	--	--	--	--	--	--	**4.52E-04**
Sn-126	4.29E-05	2.31E-05	8.28E-01	--	1.59E-05	1.30E-01	--	--	--	--	**9.58E-01**
Sr-85	1.21E-08	--	--	--	--	--	--	--	--	--	**1.21E-08**
Sr-89	5.01E-09	--	--	--	--	--	--	--	--	--	**5.01E-09**
Sr-90	2.37E+03	2.11E+02	1.43E+05	3.77E+04	3.00E+01	5.57E+02	4.59E+04	1.35E+03	1.15E+01	5.04E+01	**2.31E+05**
Ta-182	5.41E-02	--	--	1.02E-15	--	--	--	--	--	--	**5.41E-02**
Tb-157	3.90E-02	--	--	--	--	--	--	--	--	--	**3.90E-02**
Tb-160	2.78E-08	--	--	--	--	--	--	--	--	--	**2.78E-08**
Tc-97m	1.88E-06	--	--	--	--	--	--	--	--	--	**1.88E-06**
Tc-99	6.18E-03	4.55E-02	7.24E+00	7.70E-02	9.00E-03	--	1.61E+00	2.01E-02	--	2.46E-03	**9.00E+00**
Te-121	2.96E-04	--	--	--	--	--	--	--	--	--	**2.96E-04**
Te-121m	2.97E-04	--	--	--	--	--	--	--	--	--	**2.97E-04**
Te-123	6.84E-15	--	--	--	--	--	--	--	--	--	**6.84E-15**
Te-123m	5.47E-05	--	--	--	--	--	--	--	--	--	**5.47E-05**
Te-125m	5.39E+00	7.97E-06	6.25E+01	2.58E-01	--	9.79E-05	2.08E+00	2.00E-04	--	8.95E-15	**7.02E+01**
Te-127	2.37E-04	--	--	--	--	--	--	--	--	--	**2.37E-04**
Te-127m	2.42E-04	--	--	--	--	--	--	--	--	--	**2.42E-04**
Te-129	3.52E-15	--	--	--	--	--	--	--	--	--	**3.52E-15**
Te-129m	5.50E-15	--	--	--	--	--	--	--	--	--	**5.50E-15**
Th-227	2.32E-01	--	2.23E-06	3.67E-06	--	1.65E-06	1.01E-03	4.44E-03	--	1.13E-08	**2.37E-01**
Th-228	2.42E+00	1.42E-02	2.48E-03	3.60E-02	--	8.99E-15	9.98E-14	1.79E+00	--	2.88E-13	**4.26E+00**
Th-229	5.27E-03	7.31E-05	2.11E-04	1.00E-03	4.36E-11	1.49E-12	3.27E-09	8.69E-01	--	1.70E-05	**8.76E-01**
Th-230	1.83E-05	8.88E-07	8.78E-06	5.30E-05	6.35E-08	5.10E-07	6.17E-04	1.37E-03	--	1.75E-05	**2.09E-03**
Th-231	3.86E-03	1.21E-05	4.37E-03	5.85E-02	1.21E-05	8.36E-03	6.65E+01	1.94E-03	--	3.18E-04	**6.65E+01**
Th-232	2.07E-10	2.12E-06	6.68E-05	4.67E-05	1.95E-12	1.29E-14	5.86E-13	1.44E-02	--	9.42E-13	**1.45E-02**
Th-234	6.71E-02	7.13E-08	1.09E-01	2.41E-01	4.65E-08	4.12E-05	8.36E+00	1.23E-02	3.04E-06	3.20E-03	**8.79E+00**
Tl-207	2.34E-01	--	2.26E-06	3.71E-06	--	1.67E-06	1.02E-03	4.49E-03	--	1.14E-08	**2.40E-01**
Tl-208	8.71E-01	9.56E-03	7.48E-06	1.30E-02	--	3.23E-15	3.59E-14	6.44E-01	--	1.04E-13	**1.54E+00**

Table 3-11. Total RH Radionuclide Activity (Ci) on a Site Basis Decayed through 2011
Continued

Radionuclide	ANLE	BAPL	Hanford	INL	KAPL-S	LANL	MFC	ORNL	SNL	SRS	Grand Total
Tl-209	1.11E-04	1.59E-06	4.44E-06	2.11E-05	--	3.14E-14	6.87E-11	1.83E-02	--	3.56E-07	**1.84E-02**
Tm-170	1.46E-05	--	--	--	--	--	--	--	--	--	**1.46E-05**
Tm-171	1.12E-01	--	--	--	--	--	--	--	--	--	**1.12E-01**
U-232	1.50E+00	2.62E-02	1.08E-03	3.56E-02	1.63E-06	--	--	1.78E+00	--	--	**3.34E+00**
U-233	5.40E-03	2.30E-02	6.40E-01	2.78E+00	1.82E-08	1.93E-09	1.45E-05	2.71E+01	1.20E-08	1.86E-02	**3.05E+01**
U-234	7.83E-03	1.52E-03	4.30E-01	1.17E+00	5.76E-04	2.03E-03	8.41E+00	1.11E-01	2.18E-04	1.57E-01	**1.03E+01**
U-235	3.86E-03	1.21E-05	5.35E-03	5.85E-02	1.21E-05	8.36E-03	6.65E+01	1.94E-03	1.22E-05	3.18E-04	**6.65E+01**
U-236	3.62E-05	1.41E-04	1.08E-01	7.25E-04	1.17E-04	1.04E-05	2.23E-03	1.21E-03	5.26E-07	2.21E-03	**1.14E-01**
U-237	3.17E-02	--	3.06E-01	2.26E-03	--	5.67E-04	7.93E-04	2.07E-03	--	4.88E-02	**3.93E-01**
U-238	6.71E-02	7.13E-08	1.11E-01	2.41E-01	4.65E-08	4.12E-05	8.36E+00	1.23E-02	3.04E-06	3.20E-03	**8.79E+00**
U-240	8.67E-17	--	2.32E-06	1.87E-23	--	--	--	3.79E-06	--	1.03E-12	**6.12E-06**
V-49	2.02E-01	--	--	--	--	--	--	--	--	--	**2.02E-01**
W-181	2.75E-06	--	--	--	--	--	--	--	--	--	**2.75E-06**
W-185	1.99E-08	--	--	--	--	--	--	--	--	--	**1.99E-08**
W-188	1.38E-09	--	--	--	--	--	--	--	--	--	**1.38E-09**
Xe-127	1.70E-14	--	--	--	--	--	--	--	--	--	**1.70E-14**
Y-90	2.37E+03	2.11E+02	1.41E+05	3.77E+04	3.00E+01	5.57E+02	4.59E+04	1.35E+03	--	5.04E+01	**2.29E+05**
Y-91	1.58E-07	--	--	--	--	--	--	--	--	--	**1.58E-07**
Zn-65	1.30E-03	--	8.14E-03	--	--	--	--	6.04E-15	--	--	**9.44E-03**
Zr-93	4.82E-05	1.12E-02	6.72E-04	--	1.22E-04	--	--	--	--	--	**1.20E-02**
Zr-95	1.12E-06	--	2.78E-03	--	--	--	--	--	--	--	**2.78E-03**
Grand Total	**1.31E+04**	**9.15E+02**	**7.75E+05**	**1.37E+05**	**1.50E+02**	**2.95E+03**	**2.10E+05**	**8.43E+03**	**6.94E+01**	**5.19E+03**	**1.15E+06**

Data Source: CID Data Version D.11.00 (LANL-CO 2012). Note: This table contains data for WIPP-bound waste streams only; it does not include data for emplaced or potential waste streams.

Table 3-12. Total Activity by Site Decayed through 2011

TRU Waste Site	CH Activity (Ci)	RH Activity (Ci)	Total Activity (Ci)
Argonne National Laboratory - East	3.29E+02	1.31E+04	**1.35E+04**
Bettis Atomic Power Laboratory	--	9.15E+02	**9.15E+02**
Hanford (Richland) Site	7.36E+05	7.75E+05	**1.51E+06**
Idaho National Laboratory	6.94E+04	1.37E+05	**2.06E+05**
Knolls Atomic Power Laboratory - Nuclear Fuel Services	9.26E+03	--	**9.26E+03**
Knolls Atomic Power Laboratory - Schenectady	--	1.50E+02	**1.50E+02**
Lawrence Berkeley National Laboratory	5.51E+00	--	**5.51E+00**
Lawrence Livermore National Laboratory	1.29E+04	--	**1.29E+04**
Los Alamos National Laboratory	3.81E+05	2.95E+03	**3.84E+05**
Material and Fuels Complex	1.16E+03	2.10E+05	**2.11E+05**
Nevada National Security Site	4.80E+02	--	**4.80E+02**
Nuclear Radiation Development Site	3.32E+02	--	**3.32E+02**
Oak Ridge National Laboratory	9.10E+04	8.43E+03	**9.94E+04**
Sandia National Laboratories	2.56E+01	6.94E+01	**9.49E+01**
Savannah River Site	1.56E+05	5.19E+03	**1.61E+05**
Grand Total	**1.46E+06**	**1.15E+06**	**2.61E+06**

Data Source: CID Data Version D.11.00 (LANL-CO 2012). Note: This table contains data for WIPP-bound waste streams only; it does not include data for emplaced or potential waste streams.

3.3.2 Radionuclide Changes

Radionuclide activity data improve as additional waste is characterized and emplaced at WIPP. Characterization data were used by the sites for this report that were not available at the time that inventory information was collected for the ATWIR-2011 (DOE 2011). Table 3-13 presents the changes in the total activity between the ATWIR-2011 and this report. For the purpose of this discussion of changes, the activities reported in this table were decayed to WIPP closure in 2033.

As stated earlier, the net change column applies to the total net changes, which include both increases and decreases as reported by the sites and taken from the WDS.

Table 3-13. CH/RH Activity Changes Decayed through 2033

Site	ATWIR-2011 Total Inventory (Ci)	ATWIR-2012 Total Inventory (Ci)	Total Net Change (Ci)
Hanford (Richland) Site	9.44E+05	8.51E+05	-9.30E+04
Idaho National Laboratory	1.55E+05	1.37E+05	-1.84E+04
Los Alamos National Laboratory	2.93E+05	2.62E+05	-3.06E+04
Oak Ridge National Laboratory	1.92E+04	4.22E+04	2.30E+04
Savannah River Site	2.06E+05	1.37E+05	-6.91E+04
Small Quantity Sites	1.78E+05	1.20E+05	-5.83E+04
Anticipated Total	**1.80E+06**	**1.55E+06**	**-2.46E+05**
WIPP (Emplaced)	1.27E+06	1.43E+06	1.56E+05
Grand Total	**3.07E+06**	**2.98E+06**	**-8.98E+04**

Data Source: CID Data Versions D.10.01 (LANL-CO 2011e) and D.11.00 (LANL-CO 2012).

As shown in Table 3-13, the CH- and RH-TRU waste activity reported by the sites has decreased approximately 246,000 Ci. This total decrease is offset with the emplacement of 156,000 Ci at WIPP during CY11, leaving a net decrease at the sites of about 90,000 Ci. The largest contributing waste stream to this net reduction is RL300-08 (RH, Hanford RL), with a reduction of approximately 60,500 Ci stemming from the elimination of their projected waste generation estimate. Almost as significant is LL-M001 (CH, Lawrence Livermore National Laboratory), with a decrease of 55,500 Ci attributed to a radionuclide activity calculation correction by the site. These reductions, among others, are countered by less significant gains in other waste stream inventories to achieve the overall net decrease in activity.

4.0 POTENTIAL TRU WASTE

A waste stream can be designated either “WIPP-bound” or “potential.” All TRU waste must meet all WIPP requirements (e.g., WIPP WAC, WIPP Hazardous Waste Facility Permit WAP) before it can be disposed of at WIPP.

Approximately 12% of the final form TRU waste volume reported by the TRU waste sites during this year’s data collection has been identified as potential TRU waste. While a site may

designate waste streams as potential for many different reasons, it is usually because of regulatory or physical constraints, such as the lack of characterization data. Section 4.1 identifies the reasons waste streams are designated as potential waste streams.

4.1 Categories of Potential TRU Waste

DOE has listed the criteria (Patterson 2010) for categorizing waste streams as potential. Below are the categories for which TRU waste sites would consider a waste stream to be potential TRU waste.

- TRU Determination – Any waste that is categorized as "undetermined" will remain potential until the waste stream has been officially determined to be TRU. If the waste stream is determined to be non-TRU, it will be removed from the inventory.
- Defense Determination – WIPP can only accept TRU waste resulting from defense-related activities, as stated in the WIPP LWA (U.S. Congress 1992 and 1996). Any waste that has an "unknown" defense determination will remain potential until the waste stream has been officially determined to be defense waste. If the waste stream is determined to be non-defense, it will be removed from the inventory.
- Regulatory Restrictions – There are numerous regulatory restrictions that would prevent waste in its current form from coming to WIPP. Examples include limits on curies and dose rates on RH canisters, limits for total emplacement curies on RH waste, prohibited Resource Conservation and Recovery Act (RCRA) hazardous waste, etc. Sites must treat, repackage, or remove any restricted items before such waste can be accepted for disposal at WIPP.
- Incomplete Data – Waste that has missing or incomplete data, such as radionuclide activities, WMP masses, final form container data, or unknown waste stream information, is deemed potential until required data are obtained.
- Directed by DOE to Move to Potential – Waste will be moved to potential at the direction of DOE.

Waste streams categorized as "potential" may become eligible for disposal at WIPP if all requirements, as noted above, are met and the waste meets all WIPP requirements (e.g., WIPP WAC, WIPP Hazardous Waste Facility Permit WAP). Table 4-1 identifies the current potential CH- and RH-TRU waste streams. Table 4-2 identifies waste streams that were moved from potential to WIPP-bound during this reporting period.

Table 4-1. Potential WIPP CH/RH-TRU Waste Streams

Waste Stream ID[1]	Handling	Final Form Anticipated Volume (m^3)	Categories of Potential WIPP CH/RH-TRU Waste
AW-IN-TRA-BE-01	RH	3.12E+01	Regulatory Restrictions
AW-W018	RH	2.67E+00	Regulatory Restrictions

Table 4-1. Potential WIPP CH/RH-TRU Waste Streams
Continued

Waste Stream ID[1]	Handling	Final Form Anticipated Volume (m^3)	Categories of Potential WIPP CH/RH-TRU Waste
AW-W019	RH	8.90E-01	Regulatory Restrictions
BL-Parks	CH	9.62E+00	Incomplete Data
BL-Parks-A	RH	6.24E-01	Incomplete Data
IN-JH826CH	CH	8.32E-01	Incomplete Data
IN-SBW-01A	RH	5.99E+02	TRU Waste Determination
IN-SBW-01B	RH	8.90E+01	TRU Waste Determination
IN-W139	CH	8.32E-01	Incomplete Data
IN-W269	CH	2.41E+01	Incomplete Data
IN-W322	CH	5.67E+00	Defense Determination
IN-W338	CH	1.25E+00	Incomplete Data
IN-W339	CH	1.02E+01	Incomplete Data
IN-W342R	RH	6.24E-01	Defense Determination
IN-W350	CH	2.08E-01	Incomplete Data
IN-W359R	RH	6.24E-01	Incomplete Data
IN-W360	CH	1.89E+00	Regulatory Restrictions
LA-OS-00-04	CH	2.08E-01	Incomplete Data
LA-TA-00-04	CH	2.08E-01	Regulatory Restrictions
LA-TA-03-17	CH	1.89E+01	Incomplete Data
LA-TA-03-21	CH	9.45E+01	Incomplete Data
LA-TA-03-23	CH	6.62E+01	Incomplete Data
LA-TA-03-33	CH	2.08E-01	Incomplete Data
LA-TA-21-11	CH	1.70E+01	Incomplete Data
LA-TA-50-12	CH	9.66E+00	Incomplete Data
LA-TA-50-15	CH	7.56E+00	Regulatory Restrictions
LA-TA-50-20	CH	4.16E-01	Incomplete Data
LA-TRU-Empty	CH	3.21E+01	Incomplete Data
RL300-11	RH	7.49E+00	Regulatory Restrictions
RLCH2-08	RH	2.82E+02	TRU Waste Determination
RLPFP-10	RH	2.31E+01	Incomplete Data
RLPRC-01	CH	1.89E+00	Defense Determination
RP-TFC001	CH	4.39E+02	Directed by DOE to Move to Potential
RP-W754	CH	3.23E+02	Directed by DOE to Move to Potential
RP-W755	CH	7.94E+02	Directed by DOE to Move to Potential
SR-T001-WSB-1	CH	4.51E+03	Incomplete Data

Table 4-1. Potential WIPP CH/RH-TRU Waste Streams
Continued

Waste Stream ID[1]	Handling	Final Form Anticipated Volume (m^3)	Categories of Potential WIPP CH/RH-TRU Waste
SR-W027-773A-HET-CLAS	CH	1.89E+01	Incomplete Data
SR-W027-UNK	CH	3.65E+01	Incomplete Data
WV-M010a	CH	9.45E+00	Directed by DOE to Move to Potential
WV-T004	CH	3.33E+00	Directed by DOE to Move to Potential
WV-T006a	CH	3.25E+02	Directed by DOE to Move to Potential
WV-T006b	RH	3.55E+02	Directed by DOE to Move to Potential
WV-T017b	RH	2.37E+01	Directed by DOE to Move to Potential
WV-W024a	CH	2.92E+01	Directed by DOE to Move to Potential
WV-W024b	RH	9.48E+01	Directed by DOE to Move to Potential
WV-Z001	CH	1.35E+03	Directed by DOE to Move to Potential
Grand Total		**9.66E+03**	

[1]See Figure 1-1 for site designators; Data Source: CID Data Version D.11.00 (LANL-CO 2012).

Table 4-2. Potential to WIPP-Bound Waste Streams

Waste Stream ID[1]	Reason
IN-BN203	Received complete data
IN-W337	Determined to be defense waste
RL221U-01	Regulatory restrictions were resolved (moved into RL221U-03)
SR-W027-221H-HET-B	Received complete data (moved into SR-W027-221H-HET-C)
SR-W027-321-322M-HET	Received complete data (a portion moved into SR-W027-321M-HOM)

[1]See Figure 1-1 for site designators; Data Source: CID Data Version D.11.00 (LANL-CO 2012).

5.0 CONCLUSION

WIPP has been receiving TRU waste since March 26, 1999. As of December 31, 2011, WIPP had received 10,244 shipments of TRU waste (9,708 CH shipments and 536 RH shipments) (DOE 2012). During this reporting period (January through December 2011), 7,192 m^3 of CH-

TRU waste, 39.98 m^3 of RH-TRU waste (DOE 2012), and 4.13 million kg of waste and packaging materials have been emplaced at WIPP, totaling 156,000 curies of activity.

This report is an update to the ATWIR-2011. Like the ATWIR-2011, this report focuses on changes resulting from characterization, improved estimations, and continued waste generation. It also identifies the waste streams that have been moved from the designation of "potential" waste streams to the designation of "WIPP-bound" waste streams. The cutoff date for data collection was December 31, 2011. This report provides current TRU waste inventory information for CBFO, the DOE complex, WIPP stakeholders, and regulators.

This report's appendices include WIPP-bound and potential TRU WPRs, a historic crosswalk of TRU waste streams, and the CBFO screening memorandum (Patterson 2010). These can be found in Appendices A, B, C, and D, respectively.

6.0 GLOSSARY

Acceptable Knowledge – Title 40 CFR 194.2 defines acceptable knowledge as any information about the process used to generate waste, material inputs to the process, and the time period during which the waste was generated, as well as data resulting from the analysis of waste, conducted prior to or separate from the waste certification process authorized by EPA's certification decision, to show compliance with Condition 3 of the certification decision. (U.S. EPA 1996)

Anticipated Inventory – As defined in this report, the sum of the total stored and total projected inventory volumes reported by the TRU waste sites.

Complexing Agents – Organic molecules that are capable of binding to metals. These organic molecules include, but are not limited to, acetate, citrate, oxalate, and EDTA.

Contact-Handled TRU Waste – Packaged TRU waste with an external surface dose rate not greater than 200 millirem (mrem) per hour.

Current Form Waste – The chemical and physical state of waste when it is generated and as it is currently being stored on site.

Defense Waste – (1) Radioactive waste from any activity performed in whole or in part in support of DOE atomic energy defense activities. Excludes waste under the purview of the Nuclear Regulatory Commission or generated by the commercial nuclear power industry. (2) Nuclear waste derived mostly from the manufacturer of nuclear weapons, weapons-related research programs, the operation of naval reactors, and the decontamination of nuclear weapons production facilities.

Department of Energy Site – A DOE-owned or controlled tract used for DOE operations. Either a tract owned by DOE or a tract leased or otherwise made available to the federal government under terms that afford to DOE rights of access and control substantially equal to those that DOE would possess if it were the holder of the fee (or pertinent interest therein) as agent of and on behalf of the government. One or more DOE operations/program activities are carried out within the boundaries of the described tract.

Disposal – Emplacement of waste in a manner that assures isolation from the biosphere for the foreseeable future with no intent of retrieval and that requires deliberate action to regain access to the waste.

Emplaced Inventory – Waste that has been disposed of at WIPP as of the inventory date (December 31, 2011) for this report.

Final Form Waste – Form of waste in approved packaging that will be shipped to and emplaced at WIPP.

Land Withdrawal Act – The 1992 legislation passed by the U.S. Congress as Public Law 102-579, withdrawing the surface land and underlying minerals at the WIPP site from public use, transferring the property from the Bureau of Land Management to DOE, and enabling the start of the WIPP Test Phase. This act was amended in 1996 by Public Law 104-201.

Mixed TRU Waste – TRU waste that contains both radioactive and hazardous components as defined by the Atomic Energy Act (U.S. Congress 1954) and the RCRA as codified in Title 40 CFR 261.3. The RCRA test phase was removed by Public Law 104-201 in the 1996 LWA Amendments.

Oxyanions – Negatively-charged ionic species containing oxygen, such as sulfate, nitrate, and phosphate.

Payload Container Volume – For the purpose of this document, the payload container volume is the volume that the final form package occupies at the time it is emplaced in the repository. An example of payload container volume used in this context is a ten-drum overpack (TDOP) with a volume of 4.50 m^3.

Performance Assessment – PA is an analysis that: (1) identifies the processes and events that might affect the disposal system; (2) examines the effects of these processes and events on the performance of the disposal system; and (3) estimates the cumulative releases of radionuclides, considering the associated uncertainties, caused by all significant processes and events. These estimates are incorporated into an overall probability distribution of cumulative release to the extent practicable.

Performance Assessment Baseline Calculations – A PA run during the recertification that incorporates EPA requested changes. The results of this PA become the WIPP regulatory performance baseline that demonstrates compliance with EPA's radioactive waste containment requirements.

Potential Inventory – For this report, a designation for a waste stream that will not be included in PA calculations. This designation is not intended to identify whether the waste stream may or may not be emplaced at WIPP.

Projected Inventory – That part of the inventory that has not been generated (does not physically exist) but is estimated to be generated at some time in the future by the TRU waste sites. TRU waste in projected waste streams includes waste from programs that have not come on line at this time, as well as waste from ongoing projects and D&D waste that has not yet been packaged.

Radioactive – Term used to refer to an unstable atomic nucleus that decays with the spontaneous emission of ionizing radiation (see also "radionuclide").

Radionuclide – (1) A species of atom having an unstable nucleus that is subject to spontaneous decay or disintegration and usually accompanied by the emission of ionizing radiation. (2) Any nuclide that emits radiation. A nuclide is a species of atom characterized by the constitution of its nucleus and hence by the number of protons, the number of neutrons, and the energy content.

Reacted Cement – Cement that has been hydrated by setting up under aqueous conditions.

Remote-Handled TRU Waste – Packaged TRU waste with an external surface dose rate equal to or exceeding 200 mrem per hour.

Retrievably Stored Waste – Stored waste that includes waste stored in buildings or berms with earthen cover since 1970, but does not include waste buried prior to 1970. Retrievably stored waste also includes waste that is stored in underground storage tanks or ponds.

Stored Inventory – That part of the TRU waste inventory that is currently in retrievable storage as of the data cutoff date for inventory information. Stored inventory can be "current form waste" or "final form waste."

Transuranic – Pertaining to elements that have atomic numbers greater than 92, including neptunium, plutonium, americium, and curium. All are radioactive, are not naturally occurring, and are members of the actinide group.

Transuranic Waste – The LWA definition of transuranic waste is: "Transuranic waste is radioactive waste containing more than 100 nanocuries (3700 becquerels) of alpha-emitting transuranic isotopes per gram of waste, with half lives greater than 20 years, except for: (1) high-level radioactive waste; (2) waste that the Secretary of Energy has determined, with the concurrence of the Administration of the Environmental Protection Agency, does not need the degree of isolation required by 40 CFR Part 191 disposal regulations; (3) waste that the Nuclear Regulatory Commission has approved for disposal on a case-by-case basis in accordance with 10 CFR Part 61."

TRU Waste Sites – The five major DOE facilities and several smaller sites throughout the U.S. that generate and store TRU waste.

Unreacted Cement – Dry cement that was added as an absorbent or neutralizer to a waste stream, but under dry, non-aqueous conditions.

Waste Acceptance Criteria – The criteria used to determine if waste is acceptable for disposal at WIPP. For the purposes of this document, WAC refers to the WIPP WAC.

Waste Form – The physical form of the waste, such as sludges, combustibles, metals.

Waste Isolation Pilot Plant– The project authorized under Section 213 of the DOE National Security and Military Applications of Nuclear Energy Authorization Act of 1980 (U.S. Congress 1979) to demonstrate the safe and environmentally-sound disposal of radioactive waste materials generated by atomic energy defense activities.

Waste Material Parameter– A non-radiological material that is found in TRU waste. As an example, CPR is monitored as a contributor to the generation of gas at WIPP.

Waste Stream – Waste material generated from a single process or from an activity that is similar in material, physical form, and hazardous constituents.

Waste Stream Profile – A description of a CH- or RH-TRU waste stream that has been designated as WIPP-bound or potential. The waste profile is presented in tabular format and is intended to provide a summary of the important information about a particular waste stream**.**

WIPP-Bound Inventory – For this report, the designation for a waste stream that will be included in performance assessment calculations. This designation is not intended to identify whether or not the waste stream will be emplaced at WIPP.

7.0 REFERENCES

EPA, Ecology, and DOE 2011. *Record of Decision, Hanford 200 Area, 200-CW-5 and 200-PW-1, 200-PW-3, and 200-PW-6 Superfund Site, Benton County, Washington*. U.S. Environmental Protection Agency, Washington State Department of Ecology, and U.S. Department of Energy, Olympia, Washington**.**

French, D. 2009. *Analysis of Container Material Masses,* INV-SAR-19. Los Alamos National Laboratory – Carlsbad Operations, Carlsbad, NM.

Los Alamos National Laboratory – Carlsbad Operations (LANL-CO) 2010. *Analyses*, LCO-QP9-1. Los Alamos National Laboratory – Carlsbad Operations, Carlsbad, NM.

Los Alamos National Laboratory – Carlsbad Operations (LANL-CO) 2011a. *Data Collection, Data Management, and Control for the Comprehensive Inventory*, INV-SP-01. Los Alamos National Laboratory – Carlsbad Operations, Carlsbad, NM.

Los Alamos National Laboratory – Carlsbad Operations (LANL-CO) 2011b. *Entry, Verification, and Validation of Inventory Information in the Comprehensive Inventory Database*, INV-SP-02. Los Alamos National Laboratory – Carlsbad Operations, Carlsbad, NM.

Los Alamos National Laboratory – Carlsbad Operations (LANL-CO) 2011c. *LANL-CO Software Quality Assurance Plan*, LCO-QPD-02. Los Alamos National Laboratory – Carlsbad Operations, Carlsbad, NM.

Los Alamos National Laboratory – Carlsbad Operations (LANL-CO) 2011d. *Software Quality Assurance*, LCO-QP19-1. Los Alamos National Laboratory – Carlsbad Operations, Carlsbad, NM.

Los Alamos National Laboratory – Carlsbad Operations (LANL-CO) 2011e. *Comprehensive Inventory Database*, Version 2.0, Schema Version S2.00, Data Version D.10.01. Los Alamos National Laboratory – Carlsbad Operations, Carlsbad, NM.

Los Alamos National Laboratory – Carlsbad Operations (LANL-CO) 2012. *Comprehensive Inventory Database*, Version 2.01, Schema Version S2.01, Data Version D.11.00. Los Alamos National Laboratory – Carlsbad Operations, Carlsbad, NM.

Oak Ridge National Laboratory (ORNL) 2009. *SCALE: A Modular Code System for Performing Standardized Computer Analyses for Licensing Evaluation*, ORNL/TM-2005/39, Version 6, Vols. I–III, January 2009, Oak Ridge National Laboratory, Oak Ridge, TN. Available from Radiation Safety Information Computational Center (RSICC) at Oak Ridge National Laboratory as CCC-750.

Patterson, R. 2010. *TRU Waste Inventory Screening Guidance*, letter to Mr. [Ned] Elkins, dated March 29, 2010, CBFO:ORC:RLP:MDA:10-0945:UFC 5822.00. Carlsbad Field Office, Carlsbad, NM.

Patterson, R. 2012. *2012 Annual Update to the Transuranic Waste Inventory for the Waste Isolation Pilot Plant*, Letter to Distribution, January 24, 2012, CBFO: OESH:RLP:ANC:12-0704:UFC5822.00. Carlsbad Field Office, Carlsbad, NM.

U.S. Congress 1954. Public Law 83-703, 1954, *Atomic Energy Act of 1954*, August 15, 1954.

U.S. Congress 1979. Public Law 96-164, 1980, *National Security and Military Applications of Nuclear Energy Authorization Act of 1980*, 93 Stat. 1259.

U.S. Congress 1992 and 1996. *Waste Isolation Pilot Plant Land Withdrawal Act*, Public Law 102-579 (1992), as amended by Public Law 104-201 (1996).

U.S. Department of Energy (DOE) 2004. *Title 40 CFR Part 191 Subparts B and C, Compliance Recertification Application* 2004, DOE/WIPP-2004-3231, March 2004. Carlsbad Field Office, Carlsbad, NM.

U.S. Department of Energy (DOE) 2009. *Title 40 CFR Part 191 Subparts B and C Compliance Recertification Application for the Waste Isolation Pilot Plant*, DOE/WIPP-09-3424. March 2009. Carlsbad Field Office, Carlsbad, NM.

U.S. Department of Energy (DOE) 2010. *Quality Assurance Program Document*, DOE/CBFO-94-1012. Carlsbad Field Office, Carlsbad, NM.

U.S. Department of Energy (DOE) 2011. *Annual Transuranic Waste Inventory Report – 2011*, DOE/TRU-11-3425, November 2011. Carlsbad Field Office, Carlsbad, NM.

U.S. Department of Energy (DOE) 2012. *Waste Data Systems CH and RH Waste Volume, Shipments and Emplaced Volume*. Carlsbad Field Office, Carlsbad, NM.

U.S. Environmental Protection Agency (EPA) 1993. *Environmental Radiation Protection Standards for the Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Wastes*, Title 40 CFR, Part 191, Federal Register, Vol. 58, Page 66398, December 20, 1993. U.S. Environmental Protection Agency, Washington, D.C.

U.S. Environmental Protection Agency (EPA) 1996. *Criteria for the Certification and Recertification of the Waste Isolation Pilot Plant's Compliance With the 40 CFR Part 191 Disposal Regulations*, Final Rule, Title 40 CFR, Part 194, Federal Register, February 9, 1996. U.S. Environmental Protection Agency, Washington, D.C.

Van Soest, G. 2012. *WDS Data Transformation for Insertion in the 2011 Inventory CID Import Template*, INV-SAR-26. Los Alamos National Laboratory–Carlsbad Operations, Carlsbad, NM.

APPENDIX A WIPP-BOUND TRU WASTE PROFILE REPORTS

The following waste profile reports contain information on waste streams that are placed in the WIPP-bound category as of the inventory date, December 31, 2011.

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

AE	Argonne National Laboratory - East
AW	Material and Fuels Complex
BT	Bettis Atomic Power Laboratory
IN	Idaho National Laboratory
KA	Knolls Atomic Power Laboratory - Schenectady
KN	Knolls Atomic Power Laboratory - Nuclear Fuel Services
LA	Los Alamos National Laboratory
LB	Lawrence Berkeley National Laboratory
LL	Lawrence Livermore National Laboratory
ND	Nuclear Radiation Development Site
NT	Nevada National Security Site
OR	Oak Ridge National Laboratory
RL	Hanford (Richland) Site
SA	Sandia National Laboratories
SR	Savannah River Site

Waste Stream ID: **AE-T001**

Appendix A

Waste Profile Report

Site	Argonne National Laboratory - East	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	ANL-E Contact-Handled Mixed Heterogeneous Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	7.3	66.6	73.8
Box-Misc	5.5	0.0	5.5
Current Form Total	12.8	66.6	79.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	11.0	66.6	77.6
Final Form Total	11.0	66.6	77.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	55.95
Aluminum-based Metal/Alloys	6.31
Other Metal/Alloys	16.93
Other Inorganic Materials	3.47
Cellulosics	4.35
Rubber	5.32
Plastics	46.07
Cement	0.00
Solidified Inorganic Material	1.19
Solidified Organic Material	0.31
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.55E-02
Am-243	1.46E-02
Cm-244	3.18E+00
Cs-137	4.14E-02
Np-237	5.80E-04
Pu-238	2.11E-02
Pu-239	1.41E-01
Pu-240	9.80E-02
Pu-241	2.52E-01
Pu-242	9.25E-05
Pu-244	4.60E-08
Sr-90	3.57E-02
Th-229	4.78E-09
Th-230	4.73E-05
Th-232	5.28E-08
U-233	3.68E-05
U-234	7.83E-05
U-235	1.08E-06
U-236	1.18E-07
U-238	7.10E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D027, D028, D029, D030, D037, F002, F004, F005

TRUCON Code(s)

116/216, 125/225

Waste Stream Description

The debris waste consists primarily of organic and inorganic laboratory debris. Organic debris materials includes paper, cardboard, cloth, (e.g., rags, towels, trays), plastic (e.g., bags, caps, containers, tubing, fittings, filters, sheeting, tape, vials, syringes), rubber (e.g., tubing, gloves. Inorganic debris materials include aluminum items, glass (e.g., bottles, labware, dishes, vials), tools, lead (e.g., scrap, shielding), metal cans, scrap metal (e.g., piping, valves, bolts, clamps, rings, rods, screws, tubing, wire), laboratory equipment (electric motors, pumps, and circuit boards).

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **AE-T003**

Appendix A

Waste Profile Report

Site	Argonne National Laboratory - East	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	ANL-E Contact-Handled Solidified Organic and Inorganic Homogenous Solids					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.7	0.0	1.7
Box-Misc	0.5	0.0	0.5
Current Form Total	2.1	0.0	2.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.1	0.0	3.1
Final Form Total	3.1	0.0	3.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	96.32
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	281.63
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.21E-01
Am-243	1.10E-02
Cm-244	3.26E-03
Cs-137	9.24E-02
Np-237	5.93E-04
Pu-238	1.02E+00
Pu-239	5.09E-01
Pu-240	4.71E-01
Pu-241	4.56E+00
Pu-242	4.35E-03
Pu-244	4.34E-08
Sr-90	6.53E-02
Th-229	3.74E-09
Th-230	3.29E-05
Th-232	3.64E-07
U-233	3.83E-05
U-234	2.88E-05
U-235	1.20E-06
U-236	8.50E-07
U-238	2.90E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D027, D028, D029, D030, D037, F002, F004, F005

TRUCON Code(s)

111/211, 113/213, 129/229

Waste Stream Description

Waste stream consists of mixed homogeneous solids generated during the neutralization and solidification of aqueous and inorganic liquids originating from Argonne laboratory and maintenance operations.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **AE-T009**

Appendix A

Waste Profile Report

Site	Argonne National Laboratory - East	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	RH TRU					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
30-gal Drum	2.9	17.5	20.5
55-gal Drum Dir Ld w/o Liner	7.7	0.0	7.7
Miscellaneous	8.5	0.0	8.5
Current Form Total	19.1	17.5	36.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 30-gal w/o Liner	3.1	18.0	21.0
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	16.8	0.0	16.8
Final Form Total	19.9	18.0	37.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	54.79
Aluminum-based Metal/Alloys	16.54
Other Metal/Alloys	70.80
Other Inorganic Materials	9.61
Cellulosics	0.80
Rubber	8.00
Plastics	18.77
Cement	0.00
Solidified Inorganic Material	9.25
Solidified Organic Material	11.74
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	12.76
Packaging Material, Rubber	0.83
Packaging Material, Steel	1311.55
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.06E+00
Am-243	8.04E-02
Cm-244	4.53E+00
Cs-137	8.25E+01
Np-237	1.21E-04
Pu-238	3.73E+00
Pu-239	2.42E+00
Pu-240	1.55E+00
Pu-241	3.49E+01
Pu-242	1.89E-03
Pu-244	2.29E-18
Sr-90	6.25E+01
Th-229	1.39E-04
Th-230	4.82E-07
Th-232	5.48E-12
U-233	1.43E-04
U-234	2.07E-04
U-235	1.02E-04
U-236	9.57E-07
U-238	1.77E-03

Haz. Waste No(s).

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

TRUCON Code(s)

321, 322, 325

Waste Stream Description

Waste stream consists of RH TRU debris generated by destructive and nondestructive examination of radiological materials such as fuel pins, reactor structural materials, and targets in waste cans. Some of the wastes are contaminated primarily with fissile materials, mixed fission products (MFP), and activation products. This waste stream consists predominantly of organic and inorganic debris generated during the destructive and nondestructive examinations, and contains the following materials. Cellulosic items including paper, cellophane tape, cardboard, cotton, leather, rags, cloth, towels, grinding paper, boxes, liners, High-Efficiency Particulate Air (HEPA) filter media, filter paper, tissues, string, boxes, rope, swabs, mop heads, and gloves. Wooden items including brooms, mop head and handles, HEPA filter frames, rulers, brushes, blocks, and Masonite, plywood, cork, fiber board, and chipboard items. Plastic materials including polyethylene, polypropylene, polyvinyl chloride, phthalate, Koroseal, Tygon, styrene butadiene, polyurethane, Lucite, Nylon, Teflon, Nalgene, and epoxy (hardened), metallurgical (Bakelite) sample mounts, bottles, cups, dishes, pipettes, tubing, funnels, pipe, bags, filter cartridges, sheeting, vials, tape, syringes, markers, and other miscellaneous items. Rubber items including Neoprene, Viton, butyl,

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

latex, and silicone O-rings, gaskets, stoppers, hose, tubing, gloves, wire/cord insulation, and other miscellaneous items. Glass items including glass, ceramic, alumina, porcelain, quartz, Pyrex, Vycor, and boron nitrite bottles, jars, tubing, caps, condensers, beakers, flasks, graduated cylinders, Petri dishes, plates, syringes, insulation (fiber glass), firebrick, insulators, light bulbs, thermometers, lenses, and other items. Metal items (ferrous materials), including carbon steel, stainless steel, and cast iron cans, buckets, dies, slings, equipment, tools, tubing, fittings, rods, rings, rounds, chain, saw blades, dustpans, motors, fixtures, heating mantles, hot plates, mortar and pestles, steel wool, manipulator parts and tape, trays, variacs, vessels, capsules, and other miscellaneous scrap items. Non-ferrous metals items including aluminum, brass, bronze, copper, lead, gold,tungsten, tantalum, tin, vanadium, zinc, zirconium, cans (including punctured aerosol cans), cladding, vials, mesh sample holders, sheeting, foils, tools, wire, shot, rods, cable, tubing, capsules, fittings, gaskets, gauges, plates, motors, pumps, samples, solenoid valves, thermocouples, variacs, light fixtures (no PCB ballasts), and other miscellaneous scrap items. In addition to the debris materials described above, waste stream will also contain lesser amounts (less than 50 percent in any container) of homogeneous organic and inorganic materials. Clay and vermiculite based absorbents are used during the neutralization and evaporation of acids, etchants, and solutions generated during the passivation of reactive metals. Solidifications agents such as Acid Bond, Aquaset, Petroset, or Petrobond may also be used to immobilize some liquids. Wastes are visually inspected at packaging to ensure that the waste is compliant per the ANL Acceptable Knowledge document.

Waste Stream ID: **AW-5410N**

Appendix A

Waste Profile Report

Site	Material and Fuels Complex	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	RH TRU ATR Complex Legacy from Hot-Cell Cleanup					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Box - Steel w/ lead-lined 55-gal drum	2.7	0.0	2.7
Current Form Total	2.7	0.0	2.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/o Liner	0.1	0.0	0.1
Final Form Total	0.1	0.0	0.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	50.62
Aluminum-based Metal/Alloys	16.90
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	8.43
Rubber	0.00
Plastics	8.43
Cement	0.00
Solidified Inorganic Material	7.63
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.60
Packaging Material, Rubber	1.04
Packaging Material, Steel	3619.47
Packaging Material, Lead	3814.16

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.86E-01
Am-243	1.73E-03
Cm-244	1.64E-05
Cs-137	2.44E+00
Np-237	4.35E-05
Pu-238	1.95E-01
Pu-239	5.32E-02
Pu-240	8.01E-02
Pu-241	2.98E+00
Pu-242	2.17E-04
Sr-90	5.16E+00
Th-229	3.32E-14
Th-230	2.82E-10
Th-232	2.34E-19
U-233	3.78E-10
U-234	1.59E-05
U-235	2.74E-06
U-236	4.74E-09
U-238	5.44E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

Waste Stream Description

Lab debris: fuel examination waste rod pieces (Severe Fuel Damage tests), met mounts, small plastic and metal containers, Tygon tubing, etc.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **AW-5649N**

Appendix A

Waste Profile Report

Site	Material and Fuels Complex	**Summary Category**	S3000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	CH TRU ATR Complex					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	67.79
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.28E-03
Np-237	2.00E-09
Pu-238	3.42E-05
Pu-239	1.18E-02
Pu-240	5.86E-03
Pu-241	8.78E-02
Th-229	1.09E-18
Th-230	4.06E-15
Th-232	3.85E-20
U-233	1.26E-14
U-234	2.93E-10
U-235	3.48E-11
U-236	5.21E-10

No Hazardous Waste Numbers Provided

TRUCON Code(s)

113/213

Waste Stream Description

This waste stream consists of solidified actinide solutions using Aquaset-II.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **AW-5882N**

Appendix A

Waste Profile Report

Site	Material and Fuels Complex	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	RH TRU INL ATR Complex ARMF Capsules					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	1.24
Other Metal/Alloys	0.00
Other Inorganic Materials	0.14
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.70
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.01E-01
Cs-137	3.54E-01
Np-237	4.58E-07
Sr-90	3.50E-01
Th-229	1.41E-15
U-233	6.88E-12
U-235	1.06E+02

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

Waste Stream Description

ARMF/CRMF encapsulated irradiated fuel examination waste and ATR hot-cell debris.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Material and Fuels Complex	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	MFC CH-MTRU Due to RCRA Metals					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.5	4.6	6.0
Current Form Total	1.5	4.6	6.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	1.5	4.6	6.0
Final Form Total	1.5	4.6	6.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	117.45
Aluminum-based Metal/Alloys	3.43
Other Metal/Alloys	9.62
Other Inorganic Materials	74.18
Cellulosics	3.43
Rubber	0.00
Plastics	5.49
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	2.06
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.56E-01
Am-243	1.24E-16
Cm-244	2.61E-10
Cs-137	4.45E-03
Np-237	2.90E-04
Pu-238	2.51E-02
Pu-239	4.35E-01
Pu-240	1.91E-01
Pu-241	9.73E-01
Pu-242	5.27E-05
Sr-90	8.96E-03
Th-229	2.22E-13
Th-230	3.25E-07
Th-232	5.64E-10
U-233	2.52E-09
U-234	9.69E-04
U-235	3.26E-05
U-236	3.51E-06
U-238	3.14E-07

Haz. Waste No(s).

D006, D007, D008

TRUCON Code(s)

125/225

Waste Stream Description

This waste stream is debris generated in the Casting Lab, Analytical Laboratory and Fuel Manufacuring Facility glove boxes. This waste stream consists of miscellaneous generated debris (lead-lined gloves, metals, cellulosics, plastics, water (dried) and/or air filters, crucibles, etc.) contaminated with RCRA-metals (typically cadmium, lead, chromium, silver). The waste is contaminated with activation and fission products and TRU radionuclides.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Material and Fuels Complex	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	RH TRU Hot Cell Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
30-gal Drum	2.1	13.7	15.7
Canister - (MFC) o/p 45-gal Drums	5.4	269.3	274.7
Liner - RSWF	0.4	0.0	0.4
Current Form Total	7.9	283.0	290.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	6.9	82.4	89.2
Final Form Total	6.9	82.4	89.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	1036.36
Aluminum-based Metal/Alloys	8.03
Other Metal/Alloys	317.94
Other Inorganic Materials	11.60
Cellulosics	9.84
Rubber	0.00
Plastics	10.85
Cement	0.00
Solidified Inorganic Material	1.57
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.70
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.58E+00
Am-243	1.19E-10
Cm-244	2.74E-08
Cs-137	3.26E+02
Np-237	1.13E-03
Pu-238	4.05E-02
Pu-239	9.64E+00
Pu-240	4.23E+00
Pu-241	1.87E-01
Pu-242	1.16E-04
Sr-90	5.01E+02
Th-229	1.52E-11
Th-230	6.91E-06
Th-232	5.53E-15
U-233	4.09E-08
U-234	9.39E-02
U-235	5.12E-03
U-236	1.45E-05
U-238	9.37E-02

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

Waste Stream Description

Fuel Conditioning Facility (FCF), Hot Fuel Examination Facility (HFEF), Analytical Lab (AL) Remote-handled (RH) Radioactive Transuranic Miscellaneous waste: hot-cell laboratory waste, metals, cellulosics, plastics, solidified samples, filters, etc. Stored at Radioactive Scrap and Waste Facility (RSWF). Waste may also include analytical samples, EBR-I waste and small quantities of subassembly hardware.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Material and Fuels Complex	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Analytical Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	MFC CH-TRU Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	2.7	27.5	30.2
Current Form Total	2.7	27.5	30.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	2.7	27.5	30.2
Final Form Total	2.7	27.5	30.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	107.74
Aluminum-based Metal/Alloys	24.69
Other Metal/Alloys	45.89
Other Inorganic Materials	88.51
Cellulosics	0.00
Rubber	0.00
Plastics	37.59
Cement	0.00
Solidified Inorganic Material	6.99
Solidified Organic Material	19.45
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.69E+00
Am-243	4.09E-03
Cm-244	2.91E-02
Cs-137	2.27E-04
Np-237	1.78E-03
Pu-238	3.10E-02
Pu-239	6.82E-01
Pu-240	1.68E-01
Pu-241	3.45E+01
Pu-242	3.02E-05
Sr-90	7.16E-04
Th-229	1.37E-12
Th-230	9.83E-08
Th-232	8.68E-12
U-233	1.55E-08
U-234	2.97E-04
U-235	7.98E-06
U-236	1.67E-06
U-238	5.97E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

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

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Material and Fuels Complex	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	RH MTRU Hot Cell Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
45-gal Drum	0.2	11.2	11.4
Liner - RSWF	0.6	0.0	0.6
Current Form Total	0.8	11.2	12.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	1.2	13.7	15.0
Final Form Total	1.2	13.7	15.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	1094.84
Aluminum-based Metal/Alloys	8.09
Other Metal/Alloys	21.73
Other Inorganic Materials	41.03
Cellulosics	19.82
Rubber	0.00
Plastics	25.76
Cement	0.00
Solidified Inorganic Material	8.15
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.70
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.02E-01
Cs-137	1.13E+02
Np-237	1.93E-04
Pu-238	4.39E-01
Pu-239	1.72E+00
Pu-240	5.38E-01
Pu-241	1.07E+00
Pu-242	2.38E-05
Sr-90	7.98E+01
Th-229	1.28E-10
Th-230	3.95E-08
Th-232	6.17E-15
U-233	7.27E-07
U-234	2.15E-03
U-235	1.22E-04
U-236	6.26E-05
U-238	2.42E-04

Haz. Waste No(s).

D006, D007, D008, D009

TRUCON Code(s)

325

Waste Stream Description

This waste stream consists of miscellaneous FCF, HFEF and AL generated debris (metals, cellulosics, plastics, water (dried) and/or air filters, crucibles, etc.)

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **BT-T001**

Appendix A

Waste Profile Report

Site	Bettis Atomic Power Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Irradiated TRU material waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Hot Cell	0.0	4.9	4.9
Current Form Total	0.0	4.9	4.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	0.0	5.0	5.0
Final Form Total	0.0	5.0	5.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	297.28
Other Inorganic Materials	0.00
Cellulosics	49.68
Rubber	0.00
Plastics	148.64
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.70
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.80E-02
Am-243	7.73E-05
Cm-244	8.29E-05
Cs-137	4.23E+01
Np-237	1.10E-04
Pu-238	8.97E-01
Pu-239	7.39E-04
Pu-240	7.87E-05
Pu-241	1.56E-01
Pu-242	1.26E-05
Sr-90	4.23E+01
Th-229	1.46E-05
Th-230	1.78E-07
Th-232	4.25E-07
U-233	4.61E-03
U-234	3.04E-04
U-235	2.42E-06
U-236	2.82E-05
U-238	1.43E-08

No Hazardous Waste Numbers Provided

TRUCON Code(s)

322

Waste Stream Description

Specimen processing fines, material, and debris.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-AE-AGHC-02**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	MFC Retrievable ANL-E RH TRU Containers - Stage 2					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum	8.5	0.0	8.5
Canister - (ANL-E)	2.1	0.0	2.1
Current Form Total	10.6	0.0	10.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	156.0	0.0	156.0
Final Form Total	156.0	0.0	156.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	38.55
Aluminum-based Metal/Alloys	2.62
Other Metal/Alloys	3.97
Other Inorganic Materials	2.62
Cellulosics	4.76
Rubber	0.87
Plastics	7.25
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.12
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.70
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Cs-137	1.00E+02
Pu-239	2.72E+00
Pu-240	1.36E+00
Sr-90	1.54E+02
Th-230	1.16E-12
Th-232	5.65E-08
U-234	1.68E-08
U-235	2.86E-04
U-236	6.03E-07
U-238	3.99E-04

Haz. Waste No(s).

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

TRUCON Code(s)

321, 322, 325

Waste Stream Description

The Stage 2 waste originally consisted of 48 ANL-E Canisters filled with combustible and non-combustible scrap, recoverable and non-recoverable fissile material, bonded clad material, irradiated structural material, grinding papers, fuel fines, fuel pin pieces, and fuel impregnated with epoxy, from the destructive examination of irradiated fuel pins in the Alpha-Gamma Hot Cell at ANL-E. The contents of 13 ANL-E canisters has been repacked into 41 55-gallon drums. One canister, ANLE44, is noted to have a single 2R inner container, that contains 39 whole elements.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-AE-AGHC-02T**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Noncompliant Waste segregated From Waste stream IN-AE-AGHC-02 during repackaging.					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum	0.8	0.0	0.8
Current Form Total	0.8	0.0	0.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	1.2	0.0	1.2
Final Form Total	1.2	0.0	1.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	48.19
Aluminum-based Metal/Alloys	3.28
Other Metal/Alloys	4.96
Other Inorganic Materials	3.28
Cellulosics	5.95
Rubber	1.09
Plastics	9.06
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.15
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.70
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Cs-137	1.31E+02
Pu-239	3.55E+00
Pu-240	1.77E+00
Sr-90	2.01E+02
Th-230	1.51E-12
Th-232	7.36E-08
U-234	2.19E-08
U-235	3.73E-04
U-236	7.86E-07
U-238	5.20E-04

Haz. Waste No(s).

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

TRUCON Code(s)

321, 322, 325

Waste Stream Description

This waste stream consists of four 55 gallon drums . The waste contained in these four drums had experienced spontaneous combustion during waste sorting and repackaging operations. The waste in these drums was generated at ANL-E during destructive examination of the irradiated fuel pins and mostly contains fuel pieces and fines. In response to the spontaneous combustion Met-L-X was added to extinguish the fire and Sodium Carbonate was added to prevent further reactions. The waste will be treated in future for meeting WIPP disposition requirements.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-AECHDM-PK**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH Waste from ANL-E Maintenance and Lab Operations					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	2576.92
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	35.10
Other Inorganic Materials	932.69
Cellulosics	200.00
Rubber	29.81
Plastics	1018.27
Cement	0.00
Solidified Inorganic Material	10.58
Solidified Organic Material	23.08
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.30E+01
Am-243	6.18E-04
Cs-137	7.25E-02
Np-237	1.90E-03
Pu-238	7.50E-01
Pu-239	9.28E+00
Pu-240	3.35E+00
Pu-241	2.89E+01
Pu-242	2.47E-04
Sr-90	7.25E-02
U-234	8.89E-04
U-235	2.03E-05
U-238	4.65E-03

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D027, D028, D029, D030, D037, F002, F004, F005

TRUCON Code(s)

116/216, 125/225

Waste Stream Description

Waste stream ID-AECHDM-PK consists of repackaged mixed heterogeneous debris generated during laboratory and maintenance operations at Argonne.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN004**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Special Setups Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	228.6	0.0	228.6
Box - Misc	3.2	0.0	3.2
Current Form Total	231.8	0.0	231.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	548.1	0.0	548.1
Final Form Total	548.1	0.0	548.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.02
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.04
Other Inorganic Materials	2.43
Cellulosics	0.03
Rubber	0.01
Plastics	0.22
Cement	280.97
Solidified Inorganic Material	180.62
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.12E-01
Cs-137	1.22E-08
Np-237	1.92E-05
Pu-238	4.43E-02
Pu-239	1.15E+00
Pu-240	2.60E-01
Pu-241	1.68E+00
Pu-242	2.75E-05
Sr-90	1.33E-08
Th-229	1.46E-14
Th-230	2.14E-10
Th-232	7.58E-19
U-233	1.66E-10
U-234	1.18E-05
U-235	1.74E-06
U-236	1.54E-08
U-238	9.46E-05

Haz. Waste No(s).

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

TRUCON Code(s)

111/211

Waste Stream Description

IN-BN004 (Special Setups) waste was generated from a waste treatment process that solidified process waste (predominately laboratory waste) generated in support of plutonium operations at Rocky Flats. Resins and electrochemical milling sludges were also solidified with the liquid waste. This waste stream is comprised of solidified waste assigned IDC ID-RF-004, ID-RF-744 and ID-RF-802. ID-RF-744 is used to identify special setups retrieved from the INL Subsurface Disposal Area (SDA) Pits 11 and 12.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN050**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Source Information Not Compiled	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Solidified Solutions					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	185.10
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	2.75
Cellulosics	123.56
Rubber	0.00
Plastics	1.64
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Np-237	3.33E-04
Pu-239	1.20E-01
Th-229	3.07E-11
U-233	3.17E-08
U-235	2.60E-09

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream is from Bettis Atomic Power Laboratory. No more information is available, but the waste is thought to be solidified inorganic solutions.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN090**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Spill Clean-ups/Emergency Response Actions	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Dirt					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	228.6	0.0	228.6
Current Form Total	228.6	0.0	228.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	544.3	0.0	544.3
Final Form Total	544.3	0.0	544.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.85
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	6.65
Cellulosics	3.45
Rubber	0.00
Plastics	0.36
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.24
Soils	463.19
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.47E-03
Cs-137	2.43E-08
Np-237	6.45E-08
Pu-238	8.68E-04
Pu-239	1.57E-02
Pu-240	3.59E-03
Pu-241	2.02E-02
Pu-242	3.07E-07
Sr-90	2.66E-08
Th-229	4.79E-17
Th-230	2.23E-11
Th-232	1.05E-20
U-233	5.49E-13
U-234	1.21E-06
U-235	2.97E-07
U-236	2.12E-10
U-238	4.42E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste generated at the Rocky Flats Plant consists of dry dirt or soil generated from cleanup of spills, leaks, etc. Waste may be damp and may include evaporator pond sludge (S3000). Waste may also contain limited amounts (<50% by volume) of combustibles such as coveralls and gloves.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN095**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Pollution Control or Waste Treatment Process	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2011
Stream Name	Sewer Sludge					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	93.0	0.0	93.0
Box - Misc	25.4	0.0	25.4
Current Form Total	118.3	0.0	118.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	236.3	0.0	236.3
Final Form Total	236.3	0.0	236.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.53
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	46.14
Solidified Inorganic Material	250.58
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.62E-03
Cs-137	1.80E-08
Np-237	5.98E-09
Pu-238	8.81E-05
Pu-239	3.09E-03
Pu-240	6.86E-04
Pu-241	6.01E-03
Pu-242	8.91E-08
Sr-90	1.96E-08
Th-229	5.94E-18
Th-230	9.68E-11
Th-232	8.02E-21
U-233	5.07E-14
U-234	2.63E-06
U-235	6.50E-07
U-236	8.12E-11
U-238	9.75E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at the Rocky Flats Plant, consists of moist to dry sewer sludge generated from cleaning the stabilization ponds at the Sewer Treatment Plant

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN203**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Paper, Cloth, Metal, Glass					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	5.4	0.0	5.4
Bin - Misc	21.0	0.0	21.0
Current Form Total	26.4	0.0	26.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
TDOP w/ 10 - 55-gal Drums w/ Liners	72.0	0.0	72.0
Final Form Total	72.0	0.0	72.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.01
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	17.13
Packaging Material, Rubber	0.44
Packaging Material, Steel	231.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.07E-01
Cs-137	1.82E-08
Np-237	3.03E-06
Pu-238	1.45E-02
Pu-239	2.41E-01
Pu-240	5.82E-02
Pu-241	4.75E-01
Pu-242	6.72E-06
Sr-90	2.00E-08
Th-229	5.77E-16
Th-230	1.81E-10
Th-232	4.25E-20
U-233	1.31E-11
U-234	1.97E-05
U-235	6.13E-06
U-236	1.72E-09
U-238	1.04E-05

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, F001, F002, F003

No TRUCON Codes Provided

Waste Stream Description

This waste stream was generated by D&D activities at the Battelle Columbus Laboratory. It consists of a mixture of combustible and non-combustible items in roughly equal weights. The combustible wastes are primarily paper and plastic products and the non-combustible wastes are primarily metal with some glass.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN204**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Solidified Solutions					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.5	0.0	1.5
Current Form Total	1.5	0.0	1.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	3.8	0.0	3.8
Final Form Total	3.8	0.0	3.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	196.75
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	199.14
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.37E-02
Cs-137	8.27E-08
Np-237	6.69E-06
Pu-238	1.37E+00
Pu-239	9.50E-02
Pu-240	2.67E-02
Pu-241	1.97E-01
Pu-242	1.83E-05
Sr-90	9.06E-08
Th-229	1.15E-14
Th-230	2.60E-10
Th-232	1.76E-19
U-233	8.70E-11
U-234	1.53E-05
U-235	1.06E-06
U-236	2.37E-09
U-238	8.50E-15

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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN222**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Pollution Control or Waste Treatment Process	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Solidified Plutonium Recovery Incinerator Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	86.7	0.0	86.7
Current Form Total	86.7	0.0	86.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/o Liners	207.9	0.0	207.9
Final Form Total	207.9	0.0	207.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	4.50
Aluminum-based Metal/Alloys	0.02
Other Metal/Alloys	0.14
Other Inorganic Materials	1.81
Cellulosics	0.02
Rubber	0.04
Plastics	13.32
Cement	82.74
Solidified Inorganic Material	97.16
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.94E-01
Cs-137	2.88E-09
Np-237	2.38E-04
Pu-238	1.56E-01
Pu-239	4.02E+00
Pu-240	9.14E-01
Pu-241	6.63E+00
Pu-242	7.08E-05
Sr-90	3.15E-09
Th-229	4.09E-13
Th-230	3.55E-11
Th-232	6.01E-18
U-233	3.10E-09
U-234	1.95E-06
U-235	1.75E-07
U-236	8.12E-08
U-238	1.94E-07

Haz. Waste No(s).

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

TRUCON Code(s)

111/211, 114/214

Waste Stream Description

The waste is comprised of plutonium recovery incinerator waste. This waste stream includes solidified ash from the incinerator burn chamber and solidified soot and scrubber sludge from the incinerator off-gas system of the plutonium recovery incinerator. Although individual drums may also contain small amounts of debris (PPE, plastic, metal, glass, cement bags, Ful-Flo filters, unburned feed material and broken plastic molds) each container in this waste stream will contain >50% by volume solidified homogeneous solids. The IN-BN222 waste stream includes IDCs ID-RF-292, ID-RF-807b/696, ID-RF-818, and ID-RF-820.

Waste Stream ID: **IN-BN290**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Filter Sludge					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.5	0.0	1.5
Current Form Total	1.5	0.0	1.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
TDOP w/ 10 - 55-gal Drums w/ Liners	4.5	0.0	4.5
Final Form Total	4.5	0.0	4.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	12.20
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	22.44
Cellulosics	0.00
Rubber	0.00
Plastics	4.47
Cement	0.00
Solidified Inorganic Material	111.56
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	17.13
Packaging Material, Rubber	0.44
Packaging Material, Steel	231.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.64E-01
Np-237	3.81E-06
Pu-238	7.98E-02
Pu-239	1.92E+00
Pu-240	4.25E-01
Pu-241	1.88E+00
Pu-242	3.16E-05
Th-229	7.15E-16
Th-230	1.04E-12
Th-232	3.11E-19
U-233	1.63E-11
U-234	2.26E-07
U-235	1.89E-09
U-236	1.26E-08
U-238	4.90E-15

Haz. Waste No(s).

D006, D008, F001, F002

No TRUCON Codes Provided

Waste Stream Description

This waste stream was generated by the Rocky Flats Plant and consists of sludge generated from the incinerator off-gas system associated with the plutonium recovery operations in Building 771.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN311**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Process Heels					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	13.1	0.0	13.1
Box - Misc	3.2	0.0	3.2
Current Form Total	16.3	0.0	16.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
TDOP w/ 10 - 55-gal Drums w/ Liners	36.0	0.0	36.0
Final Form Total	36.0	0.0	36.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	1.02
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.33
Other Inorganic Materials	91.67
Cellulosics	0.00
Rubber	0.00
Plastics	19.67
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	17.13
Packaging Material, Rubber	0.44
Packaging Material, Steel	231.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.98E+00
Np-237	2.26E-05
Pu-238	6.19E-01
Pu-239	1.05E+01
Pu-240	2.46E+00
Pu-241	1.21E+01
Pu-242	1.93E-04
Th-229	2.89E-13
Th-230	6.82E-10
Th-232	1.46E-16
U-233	7.65E-10
U-234	1.63E-05
U-235	9.30E-08
U-236	6.56E-07
U-238	2.69E-13

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at the RFETS, consists of miscellaneous residues generated by laboratory operations, plutonium recovery, and R&D activities. This waste stream is comprised of IDCs ID-RF-311, ID-RF-361, and ID-RF-393

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN375**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Oil-Dri-Residue From Incinerator					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

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

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	9.5	0.0	9.5
Final Form Total	9.5	0.0	9.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	7.08
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.89
Other Inorganic Materials	137.57
Cellulosics	1.83
Rubber	0.04
Plastics	7.84
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.50E-01
Cs-137	1.09E-08
Np-237	4.21E-06
Pu-238	2.33E-02
Pu-239	6.31E-01
Pu-240	1.48E-01
Pu-241	7.74E-01
Pu-242	1.34E-05
Sr-90	1.23E-08
Th-229	1.79E-14
Th-230	1.33E-11
Th-232	2.70E-18
U-233	8.36E-11
U-234	4.54E-07
U-235	4.18E-08
U-236	2.19E-08
U-238	1.04E-14

Haz. Waste No(s).

F001, F002

TRUCON Code(s)

122/222

Waste Stream Description

This waste, from the Rocky Flats Plant, consists of spent clay absorbent materials such as oil-dri, floor dry, vermiculite, and sorbent booms. Waste may also contain <50% by volume debris (i.e., rags).

Waste Stream ID: **IN-BN409**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Salt Waste			**Inventory Date**	12/31/2011
Stream Name	Chloride Salts					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	16.6	0.0	16.6
Current Form Total	16.6	0.0	16.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
TDOP w/ 10 - 55-gal Drums w/ Liners	40.5	0.0	40.5
Final Form Total	40.5	0.0	40.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	11.46
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.61
Other Inorganic Materials	105.68
Cellulosics	0.77
Rubber	0.00
Plastics	5.90
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	17.13
Packaging Material, Rubber	0.44
Packaging Material, Steel	231.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	6.06E+00
Cs-137	1.62E-07
Np-237	5.07E-05
Pu-238	3.04E-01
Pu-239	6.24E+00
Pu-240	1.44E+00
Pu-241	9.10E+00
Pu-242	2.00E-04
Sr-90	1.78E-07
Th-229	8.06E-14
Th-230	3.72E-11
Th-232	9.48E-18
U-233	6.23E-10
U-234	2.65E-06
U-235	3.14E-08
U-236	1.28E-07
U-238	9.29E-14

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at the RFETS, includes spent salts generated by production and experimental pyrochemical operations used to recover and purify plutonium metal. This waste stream is comprised of IDCs ID-RF-409, ID-RF-410, ID-RF-411, ID-RF-412, and ID-RF-414

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN421**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Uncemented Ash/Soot					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	31.4	0.0	31.4
Current Form Total	31.4	0.0	31.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
TDOP w/ 10 - 55-gal Drums w/ Liners	72.0	0.0	72.0
Final Form Total	72.0	0.0	72.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	9.74
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.17
Other Inorganic Materials	133.47
Cellulosics	0.00
Rubber	0.00
Plastics	18.89
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	17.13
Packaging Material, Rubber	0.44
Packaging Material, Steel	231.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.08E+00
Cs-137	6.63E-08
Np-237	5.83E-05
Pu-238	9.92E-01
Pu-239	1.57E+01
Pu-240	3.62E+00
Pu-241	1.89E+01
Pu-242	3.25E-04
Sr-90	7.28E-08
Th-229	3.60E-13
Th-230	5.49E-10
Th-232	9.52E-17
U-233	1.40E-09
U-234	1.85E-05
U-235	4.30E-07
U-236	6.43E-07
U-238	4.19E-07

Haz. Waste No(s).

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

TRUCON Code(s)

114/214

Waste Stream Description

This waste stream includes ash materials generated from the treatment of plutonium-containing combustible materials that were generated during plutonium production and recovery operations at Rocky Flats. The ash materials include incinerator ash (IDC RF-420), incinerator ash heels (IDC RF-421), and incinerator soot (IDC RF-422).

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN425**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Fluid Bed Ash					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.7	0.0	1.7
Current Form Total	1.7	0.0	1.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
TDOP w/ 10 - 55-gal Drums w/ Liners	4.5	0.0	4.5
Final Form Total	4.5	0.0	4.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.49
Cellulosics	0.00
Rubber	0.00
Plastics	1.37
Cement	0.00
Solidified Inorganic Material	262.22
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	17.13
Packaging Material, Rubber	0.44
Packaging Material, Steel	231.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.29E-04
Np-237	1.56E-10
Pu-238	1.60E-04
Pu-239	5.70E-03
Pu-240	1.27E-03
Pu-241	9.76E-03
Pu-242	1.66E-07
Th-229	2.52E-19
Th-230	1.31E-10
Th-232	4.53E-20
U-233	1.61E-15
U-234	2.03E-06
U-235	2.79E-07
U-236	2.62E-10
U-238	1.91E-05

Haz. Waste No(s).

D007, F005

TRUCON Code(s)

114/214

Waste Stream Description

This waste consists of fluidized bed ash which is a fine powder generated by the fluid bed incinerator (FBI) .

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN430**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Combustible Waste			**Inventory Date**	12/31/2011
Stream Name	Unleached Ion Column Resin					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	6.0	0.0	6.0
Current Form Total	6.0	0.0	6.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
TDOP w/ 10 - 55-gal Drums w/o Liners	18.0	0.0	18.0
Final Form Total	18.0	0.0	18.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	12.83
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.99
Cellulosics	0.00
Rubber	0.00
Plastics	148.89
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.44
Packaging Material, Steel	231.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.00E-01
Cs-137	9.30E-08
Np-237	6.48E-06
Pu-238	1.08E-01
Pu-239	3.18E+00
Pu-240	7.11E-01
Pu-241	3.17E+00
Pu-242	5.30E-05
Sr-90	1.02E-07
Th-229	4.73E-15
Th-230	5.68E-12
Th-232	2.08E-18
U-233	5.45E-11
U-234	6.17E-07
U-235	6.27E-09
U-236	4.21E-08
U-238	1.65E-14

No Hazardous Waste Numbers Provided

TRUCON Code(s)

126/226

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 resins were not rinsed with water or leached with nitric acid and are uncemented . After 1972, the resins were leached, cemented and assigned IDC 432 and after August 1986 the cemented resins were assigned to IDC 806.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN431**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Combustible Waste			**Inventory Date**	12/31/2011
Stream Name	Leached Resin					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.2	0.0	1.2
Current Form Total	1.2	0.0	1.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	3.8	0.0	3.8
Final Form Total	3.8	0.0	3.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	12.62
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.98
Cellulosics	0.00
Rubber	0.00
Plastics	146.83
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.70E-01
Np-237	3.57E-04
Pu-238	1.19E-01
Pu-239	2.78E+00
Pu-240	6.42E-01
Pu-241	2.64E+00
Pu-242	4.75E-05
Th-229	6.84E-14
Th-230	1.56E-12
Th-232	4.69E-19
U-233	1.56E-09
U-234	3.38E-07
U-235	2.74E-09
U-236	1.90E-08
U-238	7.38E-15

No Hazardous Waste Numbers Provided

TRUCON Code(s)

126/226

Waste Stream Description

This waste, generated at the Rocky Flats Plant, consists of spent anionic and cationic exchange resins used in the purification and recovery of plutonium and americium, respectively. The resins were leached with nitric acid then rinsed and are uncemented. After 1972, leached resins were cemented and assigned IDC 432.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN432**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2011
Stream Name	Solidified Ion Exchange Resin from Actinide Recovery					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	65.1	0.0	65.1
Current Form Total	65.1	0.0	65.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
TDOP w/ 10 - 55-gal Drums w/ Liners	144.0	0.0	144.0
Final Form Total	144.0	0.0	144.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	9.17
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	11.67
Other Inorganic Materials	7.78
Cellulosics	0.43
Rubber	0.00
Plastics	13.40
Cement	90.28
Solidified Inorganic Material	0.00
Solidified Organic Material	105.56
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	17.13
Packaging Material, Rubber	0.44
Packaging Material, Steel	231.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.22E+01
Cs-137	3.71E-06
Np-237	6.14E-05
Pu-238	1.70E-01
Pu-239	3.86E+00
Pu-240	8.82E-01
Pu-241	5.52E+00
Pu-242	7.63E-05
Sr-90	4.06E-06
Th-229	1.02E-08
Th-230	7.46E-11
Th-232	1.61E-17
U-233	2.33E-05
U-234	2.83E-06
U-235	1.46E-07
U-236	1.31E-07
U-238	5.92E-14

Haz. Waste No(s).

D007, D008, D022, D029, F001, F002, F005

TRUCON Code(s)

126/226

Waste Stream Description

This waste stream consists of spent anionic and cationic exchange resins used in the actinide purification and recovery processes at the RFP. Spent ion exchange resins are polystyrene and divinylbenzene copolymers. The resins were leached with nitric acid, rinsed with water and solidified with Portland cement. This waste stream is comprised of IDCs ID-RF-432, and ID-RF-822

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN510**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Supercompacted Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
100-gal Drum Dir Ld w/o Liner	57.2	0.0	57.2
Current Form Total	57.2	0.0	57.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
100-gal Drum Dir Ld w/o Liner	57.2	0.0	57.2
Final Form Total	57.2	0.0	57.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	321.35
Aluminum-based Metal/Alloys	2.53
Other Metal/Alloys	5.53
Other Inorganic Materials	28.69
Cellulosics	196.94
Rubber	6.28
Plastics	119.98
Cement	0.00
Solidified Inorganic Material	0.07
Solidified Organic Material	0.00
Soils	0.07
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.31
Packaging Material, Steel	113.72
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.75E-01
Am-243	6.52E-08
Cm-244	2.13E-04
Cs-137	9.73E-08
Np-237	1.10E-05
Pu-238	1.68E-01
Pu-239	1.12E+00
Pu-240	2.43E-01
Pu-241	1.60E+00
Pu-242	2.24E-05
Sr-90	1.74E-07
Th-229	2.92E-09
Th-230	3.99E-09
Th-232	2.84E-18
U-233	8.30E-06
U-234	1.10E-04
U-235	1.01E-04
U-236	2.87E-08
U-238	3.34E-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

BN510 is a debris waste stream generated from supercompacted 55-gallon containers of debris waste.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN510.1**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Supercompacted Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	6429.5	0.0	6429.5
Bin - Misc	406.0	0.0	406.0
Box - Misc	3360.2	0.0	3360.2
Current Form Total	10195.7	0.0	10195.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
100-gal Drum Dir Ld w/o Liner	4754.9	0.0	4754.9
SWB Dir Ld w/o Liner	18.9	0.0	18.9
Final Form Total	4773.8	0.0	4773.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	16.73
Aluminum-based Metal/Alloys	0.03
Other Metal/Alloys	0.32
Other Inorganic Materials	0.44
Cellulosics	2.98
Rubber	0.17
Plastics	1.94
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.31
Packaging Material, Steel	113.88
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.05E-02
Am-243	1.68E-11
Cs-137	9.78E-10
Np-237	1.65E-07
Pu-238	5.84E-02
Pu-239	1.83E-02
Pu-240	3.88E-03
Pu-241	2.57E-02
Pu-242	4.23E-07
Sr-90	1.08E-09
U-233	5.37E-07
U-234	6.31E-08
U-235	1.86E-08
U-238	1.11E-07

Haz. Waste No(s).

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

TRUCON Code(s)

121/221

Waste Stream Description

BN510.1 is a debris waste stream generated from supercompacted 55-gallon containers of debris waste.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN600**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	AMWTP WMF-676 PCB Contaminated Debris (BN600)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	5.4	149.6	155.0
Current Form Total	5.4	149.6	155.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	5.4	149.6	155.0
Final Form Total	5.4	149.6	155.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	909.76
Aluminum-based Metal/Alloys	1.43
Other Metal/Alloys	21.45
Other Inorganic Materials	43.08
Cellulosics	128.14
Rubber	0.00
Plastics	236.69
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.11
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	8.57E-02
Np-237	2.22E-06
Pu-238	2.48E-02
Pu-239	4.47E-01
Pu-240	1.02E-01
Pu-241	5.69E-01
Pu-242	8.71E-06

Haz. Waste No(s).

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

TRUCON Code(s)

125/225

Waste Stream Description

AMWTP WMF-676 PCB contaminated debris is generated as a result of removing and/or treating prohibited PCB waste within the AMWTF WMF-676 north and south box lines and the drummed waste packaging glovebox (DWPG) and special-case waste (SCW) areas.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN806**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Solidified Process Solids					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	8.5	0.0	8.5
Current Form Total	8.5	0.0	8.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	20.8	0.0	20.8
Final Form Total	20.8	0.0	20.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.31
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.12
Cellulosics	0.02
Rubber	0.04
Plastics	3.21
Cement	97.16
Solidified Inorganic Material	114.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.23E-01
Cs-137	1.29E-08
Np-237	3.63E-06
Pu-238	6.57E-02
Pu-239	1.52E+00
Pu-240	3.47E-01
Pu-241	2.45E+00
Pu-242	2.50E-05
Sr-90	1.40E-08
Th-229	2.27E-14
Th-230	3.16E-11
Th-232	9.13E-18
U-233	8.77E-11
U-234	1.14E-06
U-235	8.97E-09
U-236	6.17E-08
U-238	2.32E-14

Haz. Waste No(s).

D008, F001, F002, F003, F005

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at Rocky Flats includes all inorganic particulate and inorganic sludge that is immobilized into a solid with Portland Cement. Each waste type was preconditioned (neutralized, thickened) with Portland cement.Cemented wastes were cast into 1-gallon molds allowed to cure. The cured "pucks" were removed from the molds in the form of a solid monolith.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN811**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Pollution Control or Waste Treatment Process	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Evaporator and Dissolver Sludge					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

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

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	3.8	0.0	3.8
Final Form Total	3.8	0.0	3.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	1.29
Aluminum-based Metal/Alloys	1.51
Other Metal/Alloys	0.00
Other Inorganic Materials	0.75
Cellulosics	4.60
Rubber	2.75
Plastics	4.68
Cement	0.00
Solidified Inorganic Material	48.14
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	8.95E-02
Np-237	3.66E-06
Pu-238	2.03E+01
Pu-239	4.40E-02
Pu-240	2.62E-02
Pu-241	8.19E-02
Pu-242	2.83E-05
Th-229	2.98E-13
Th-230	1.44E-07
Th-232	9.28E-18
U-233	3.19E-10
U-234	1.38E-03
U-235	9.54E-10
U-236	1.71E-08
U-238	5.98E-05

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

"This waste stream, generated at Mound Laboratory, consists of dry evaporator and dissolver sludge in the form of powder or sand-like particles.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN817**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Cemented Sand, Slag, Crucible Heels					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	5.6	0.0	5.6
Current Form Total	5.6	0.0	5.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	15.1	0.0	15.1
Final Form Total	15.1	0.0	15.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.06
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.01
Cellulosics	0.00
Rubber	0.00
Plastics	3.26
Cement	123.02
Solidified Inorganic Material	144.84
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.51E-01
Np-237	2.67E-06
Pu-238	5.14E-02
Pu-239	1.15E+00
Pu-240	2.62E-01
Pu-241	1.78E+00
Pu-242	1.85E-05
Th-229	2.27E-14
Th-230	3.39E-11
Th-232	9.39E-18
U-233	7.52E-11
U-234	1.04E-06
U-235	7.91E-09
U-236	5.44E-08
U-238	2.01E-14

Haz. Waste No(s).

D007

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at Rocky Flats consists of the remaining insoluable residues general following plutonium leaching and hot nitric acid. After leaching, the insoluable solution residue (heel) was collected on a filter and dried on a hotplate. The waste was preconditioned (neutralized, thickened), and portland cement was added. Cemented wastes were cast into 1-gallon molds and allowed to cure. The cured "pucks" were removed from the molds in the form of a solid monolith.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN823**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Cemented Miscellaneous Sludge					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.7	0.0	3.7
Current Form Total	3.7	0.0	3.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	9.5	0.0	9.5
Final Form Total	9.5	0.0	9.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.24
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	3.16
Cement	104.87
Solidified Inorganic Material	122.75
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.15E-03
Np-237	2.87E-02
Pu-238	1.40E-03
Pu-239	2.53E-02
Pu-240	5.79E-03
Pu-241	4.18E-02
Pu-242	6.35E-07
Th-229	2.65E-10
Th-230	9.21E-13
Th-232	2.07E-19
U-233	8.61E-07
U-234	2.84E-08
U-235	1.74E-10
U-236	1.20E-09
U-238	6.89E-16

Haz. Waste No(s).

D008, F001, F002, F003

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at Rocky Flats includes all inorganic sludge that is immobilized into a solid with Portland Cement. Each waste type was preconditioned (neutralized, thickened) with Portland Cement. Cemented wastes were cast into 1-gallon molds allowed to cure. The cured "pucks" were removed from the molds in the form of a solid monolith.

Waste Stream ID: **IN-BN835**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Solidified Acid/Caustic Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	31.0	0.0	31.0
Current Form Total	31.0	0.0	31.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	75.6	0.0	75.6
Final Form Total	75.6	0.0	75.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.02
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.06
Cellulosics	5.51
Rubber	0.02
Plastics	0.26
Cement	0.00
Solidified Inorganic Material	239.42
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.89E-02
Cs-137	2.67E-08
Np-237	3.69E-06
Pu-238	2.53E+00
Pu-239	4.09E-03
Pu-240	2.60E-03
Pu-241	8.15E-03
Pu-242	2.90E-06
Sr-90	2.92E-08
Th-229	1.09E-14
Th-230	5.39E-10
Th-232	3.04E-20
U-233	6.23E-11
U-234	2.91E-05
U-235	2.04E-09
U-236	3.08E-10
U-238	1.26E-06

Haz. Waste No(s).

D007, D008, D009, F001, F002

TRUCON Code(s)

111/211

Waste Stream Description

IN-BN835 waste stream consists of drums containing solidified acid (IDC 834) and caustic (IDC 835) wastes combined with nonhazardous absorbent. This waste stream was generated from pressed plutonium oxides sphere or plutonium molybdenum cermet production, isotope recovery, cleaning or leaching of items and construction of standards. Acidic and caustic waste was commingled during the wastewater treatment process. This waste stream consists of waste that is primarily inorganic particulate absorbent materials (>50% by volume) including absorbed aqueous liquids, if present.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN836**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Pollution Control or Waste Treatment Process	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Cemented Sludge					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	64.3	0.0	64.3
Current Form Total	64.3	0.0	64.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	153.1	0.0	153.1
Final Form Total	153.1	0.0	153.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.01
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.01
Other Inorganic Materials	0.23
Cellulosics	0.12
Rubber	0.00
Plastics	0.05
Cement	232.54
Solidified Inorganic Material	306.36
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.89E-03
Cs-137	5.29E-06
Np-237	8.68E-07
Pu-238	7.85E-02
Pu-239	2.86E-03
Pu-240	7.78E-04
Pu-241	5.55E-03
Pu-242	1.92E-07
Sr-90	5.78E-06
Th-229	1.49E-15
Th-230	1.16E-11
Th-232	5.12E-21
U-233	1.13E-11
U-234	7.57E-07
U-235	1.05E-08
U-236	6.91E-11
U-238	4.32E-09

Haz. Waste No(s).

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

TRUCON Code(s)

111/211

Waste Stream Description

IN-BN836 consists of drums containing Mound cemented sludge (IDC 836). The sludge was generated from the treatment of alpha-contaminated wastewaters at the Waste Disposal Building. The wastewater originated outside process gloveboxes from sources such as floor drains, laboratory sinks, and sumps, as well as the old alpha waste line. The wastewaters were generated from decontamination, laundry, research and analytical operations. IN-BN836 consists of >50% by volume sludge from a wastewater treatment process that was solidified with Portland Cement. Florco, a non-hazardous absorbent, may have also been added to this waste stream.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN842**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Contaminated Soil					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Box - Misc	123.6	0.0	123.6
Current Form Total	123.8	0.0	123.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	77.5	0.0	77.5
Final Form Total	77.5	0.0	77.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	34.59
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.35E-04
Np-237	1.41E-09
Pu-238	1.96E+00
Pu-239	1.08E-01
Pu-240	1.72E-04
Pu-241	5.44E-03
Pu-242	1.51E-07
Th-229	2.48E-17
Th-230	1.38E-08
Th-232	6.08E-20
U-233	4.88E-14
U-234	1.33E-04
U-235	2.35E-09
U-236	1.12E-10
U-238	5.14E-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 inchs) 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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN976**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Bldg. 776 Process Sludge					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

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
Current Form Total	64.9	0.0	64.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	52.9	0.0	52.9
Final Form Total	52.9	0.0	52.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	1.02
Cellulosics	0.00
Rubber	0.00
Plastics	0.22
Cement	0.02
Solidified Inorganic Material	264.55
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.77E+00
Cs-137	2.12E-07
Np-237	2.44E-05
Pu-238	2.72E-01
Pu-239	7.15E+00
Pu-240	1.65E+00
Pu-241	7.49E+00
Pu-242	1.36E-04
Sr-90	2.31E-07
Th-229	1.06E-13
Th-230	5.92E-10
Th-232	3.01E-17
U-233	4.90E-10
U-234	1.48E-05
U-235	1.97E-06
U-236	2.44E-07
U-238	5.61E-05

Haz. Waste No(s).

D006, D007, D008, D009, D022, D028, F001, F002, F003

No TRUCON Codes Provided

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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN978**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Laundry Sludge					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Box - Misc	34.9	0.0	34.9
Current Form Total	34.9	0.0	34.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
TDOP w/ 10 - 55-gal Drums w/ Liners	22.5	0.0	22.5
Final Form Total	22.5	0.0	22.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	2.96
Other Inorganic Materials	30.25
Cellulosics	30.25
Rubber	40.10
Plastics	8.18
Cement	268.45
Solidified Inorganic Material	402.68
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	17.13
Packaging Material, Rubber	0.44
Packaging Material, Steel	231.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.91E-03
Np-237	7.78E-09
Pu-238	5.84E-04
Pu-239	2.15E-02
Pu-240	4.78E-03
Pu-241	3.07E-02
Pu-242	6.21E-07
Th-229	1.20E-17
Th-230	3.32E-10
Th-232	8.72E-20
U-233	8.21E-14
U-234	7.22E-06
U-235	1.53E-06
U-236	7.07E-10
U-238	4.01E-05

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste consists of sludge (lint, spent detergent, dirt, and other similar waste) mixed with Portland cement generated by laundry operations. The sludge was removed from two laundry tanks located north of Building 776. Both tanks collected liquid effluent from the laundry in Building 776.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BNINW216**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Pollution Control or Waste Treatment Process	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	First/Second Stage Sludge					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2576.3	0.0	2576.3
Box - Misc	22.2	0.0	22.2
Current Form Total	2598.5	0.0	2598.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	6152.0	0.0	6152.0
Final Form Total	6152.0	0.0	6152.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.05
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.07
Other Inorganic Materials	3.82
Cellulosics	0.03
Rubber	0.02
Plastics	0.34
Cement	46.98
Solidified Inorganic Material	347.86
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.00E+00
Am-243	8.26E-09
Cs-137	1.83E-08
Np-237	4.96E-05
Pu-238	2.63E-02
Pu-239	3.41E-01
Pu-240	8.67E-02
Pu-241	9.52E-01
Pu-242	2.75E-05
Sr-90	2.00E-08
Th-229	3.67E-14
Th-230	3.71E-10
Th-232	2.53E-19
U-233	4.21E-10
U-234	2.03E-05
U-235	4.13E-06
U-236	5.14E-09
U-238	1.16E-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

IN-BNINW216 (aqueous sludge wastes from Building 774) were generated from a carrier precipitation and immobilization process (sludge mixed with diatomite and Portland Cement) The First/Second Sludge waste stream is comprised of IDCs ID-RF-001. ID-RF-002, ID-RF-741. ID-RF-742 and ID-RF-800. ID-RF-741 and ID-RF-742 are used to identify first and second stage sludge drums retrieved from the INL Subsurface Disposal Area (SDA) Pits 11 and 12 prior to 1979. The First/Second Sludge waste stream consists of >50% by volume secondary sludge or filter cake from wastewater treatment processes or heavy metal sludges from recovery processes. 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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BNINW218**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Building 374 Sludge					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	216.9	0.0	216.9
Box - Misc	6.3	0.0	6.3
Current Form Total	223.3	0.0	223.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	521.6	0.0	521.6
Final Form Total	521.6	0.0	521.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.02
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	23.77
Cellulosics	0.00
Rubber	0.01
Plastics	2.17
Cement	24.15
Solidified Inorganic Material	362.32
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.91E-02
Cs-137	3.65E-09
Np-237	2.16E-05
Pu-238	1.15E-02
Pu-239	2.07E-02
Pu-240	4.38E-03
Pu-241	3.08E-02
Pu-242	6.74E-07
Sr-90	3.98E-09
Th-229	1.99E-13
Th-230	1.74E-08
Th-232	1.57E-19
U-233	6.47E-10
U-234	2.70E-04
U-235	2.42E-05
U-236	9.07E-10
U-238	3.19E-03

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

The Building 374 Sludge waste stream (BNINW218) consists of two waste matrix codes because the cementation immobilization process for this waste stream was changed in the 1986-1987 timeframe. The feed streams to the process did not change over time. Waste matrix code S3121, Waste Water Treatment Sludge (DC 007 and IDC 807) was secondary sludge or filtercake from waste water treatment processes or heavy metal sludge resulting from recovery. Waste matrix code S3150, Solidified Homogeneous Solids (IDC 803) were from a direct cementation process. The aqueous sludge wastes from Building 374 were immobilized with cement and cured into a solidified form.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-ID-BTO-030**

Appendix A
Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Solidified Waste Sludge from Bettis Atomic Power Lab.					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum	0.8	0.0	0.8
Current Form Total	0.8	0.0	0.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	1.2	0.0	1.2
Final Form Total	1.2	0.0	1.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	89.74
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	1.50
Other Inorganic Materials	0.13
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	53.51
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.70
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.28E-03
Am-243	5.52E-04
Cs-137	3.35E+01
Np-237	5.82E-04
Pu-238	4.50E+00
Pu-239	4.95E-03
Pu-240	4.99E-03
Pu-242	4.82E-05
Sr-90	3.19E+01
Th-229	2.30E-04
Th-230	3.48E-08
Th-232	1.18E-05
U-233	1.14E-01
U-234	3.20E-04
U-235	6.39E-05
U-236	3.40E-09
U-238	1.72E-13

Haz. Waste No(s).

D004, D005, D006, D007, D008, D010, D011, D039, D040, F002

TRUCON Code(s)

327

Waste Stream Description

This waste stream consists of predominantly inorganic waste materials generated during sectioning of fuel elements, grinding, mounting and polishing of metallographic specimens solidified in concrete matrix and placed in IN-41 containers (5 in dia. x16 in long). Thirteen of these IN-41 containers were shipped from BAPL to ANL-W where IN-41 containers were placed in HFEF-5 liners (6 ft. tall x 12 in dia.). The HFEF-5 liners were sent to RWMC for interim storage in 1988. The HFEF liners have been retrieved and repackaged into 4-55 gallon drums for characterization and shipment to WIPP.

Waste Stream ID: **IN-ID-EBR-S5000**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Uncategorized Metal Waste			**Inventory Date**	12/31/2011
Stream Name	RH-TRU Debris Waste From Experimental Breeder Reactor					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum	4.4	0.0	4.4
Current Form Total	4.4	0.0	4.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	4.4	0.0	4.4
Final Form Total	4.4	0.0	4.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	3.66
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	77.84
Other Inorganic Materials	0.00
Cellulosics	0.46
Rubber	0.00
Plastics	0.82
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.70
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Cs-137	4.79E-02
Pu-239	2.55E-01
Sr-90	5.17E-02
Th-230	3.36E-06
U-234	2.44E-02
U-235	1.13E-03
U-238	2.45E-02

No Hazardous Waste Numbers Provided

TRUCON Code(s)

321, 322, 325

Waste Stream Description

Waste stream consists of waste generated from decommissioning the EBR-1 reactor after 12 years of operation. The debris consists of the reactor outer blanket components composed of natural uranium clad with stainless steel

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-ID-INL-152**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	RH-TRU Debris Waste From Materials and Fuels Complex Hot Fuel Examination Facility at the INL.					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum	0.4	0.0	0.4
Current Form Total	0.4	0.0	0.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	55.17
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	3.06
Other Inorganic Materials	1.23
Cellulosics	13.26
Rubber	1.02
Plastics	15.29
Cement	0.00
Solidified Inorganic Material	1.02
Solidified Organic Material	0.09
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.70
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Cs-137	2.65E+01
Np-237	1.35E-06
Pu-239	3.69E-01
Pu-240	1.43E-01
Sr-90	2.43E+01
Th-229	7.63E-06
Th-230	2.57E-13
Th-232	2.32E-06
U-233	3.77E-03
U-234	2.43E-09
U-235	1.49E-04
U-236	9.74E-08
U-238	3.76E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D038, F002, F005

TRUCON Code(s)

321, 322, 325

Waste Stream Description

This waste stream consists of 2-55 gallon drums repackaged from 1 insert (12 in Diax6 ft. tall). 2-55-gallon drums will be placed in a RH TRU Removable Lid Canister with one dunnage drum.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-ID-INL-152M**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	RH-TRU Debris Waste From Materials and Fuels Complex Hot Fuel Examination Facility at the INL.					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum	16.4	0.0	16.4
HFEF-5 RH Insert	0.1	0.0	0.1
Current Form Total	16.6	0.0	16.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	16.8	0.0	16.8
Final Form Total	16.8	0.0	16.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	47.88
Aluminum-based Metal/Alloys	0.88
Other Metal/Alloys	2.65
Other Inorganic Materials	10.62
Cellulosics	11.52
Rubber	0.89
Plastics	13.25
Cement	0.00
Solidified Inorganic Material	0.89
Solidified Organic Material	0.08
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.70
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.91E-01
Am-243	1.07E-12
Cm-244	1.01E-01
Cs-137	1.02E+02
Np-237	5.27E-05
Pu-238	3.45E-01
Pu-239	8.17E-01
Pu-240	2.59E-01
Pu-241	8.78E-01
Pu-242	9.85E-03
Pu-244	1.11E-24
Sr-90	1.01E+02
Th-229	1.21E-06
Th-230	6.77E-07
Th-232	1.28E-06
U-233	9.15E-04
U-234	4.92E-03
U-235	3.65E-04
U-236	3.74E-05
U-238	4.20E-03

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D038, F002, F005

TRUCON Code(s)

321, 322, 325

Waste Stream Description

This waste stream consists of 1 HFEF insert (12 in. Dia. x 6 ft. tall) and 79 55-gallon drums. Three 55-gallon will be placed in a RH TRU Removable Lid Canister for transport to WIPP. Some of the containers in this waste stream have hazardous waste codes applied by the generator.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-ID-MFC-S5400**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	MFC generated debris waste (Leaded Gloves)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Current Form Total	0.6	0.0	0.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	280.45
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	6.28E-02
Cs-137	1.14E-05
Np-237	1.60E-06
Pu-238	2.54E-03
Pu-239	8.03E-02
Pu-240	1.80E-02
Pu-241	1.44E-01
Pu-242	2.80E-06
Sr-90	1.26E-05
U-234	1.41E-05
U-235	3.78E-07

Haz. Waste No(s).

D008

TRUCON Code(s)

125/225, 127/227, 154

Waste Stream Description

Heterogeneous debris from plutonium alloy casting operations and analytical laboratory operations conducted in the MFC Analytical Laboratory. Originally generated from the MFC and were repackaged at INTEC in Building CPP-659.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-ID-MFC-SOLID**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Analytical Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	RH-TRU Waste From Materials and Fuels Complex at the INL.					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum	0.8	0.0	0.8
Current Form Total	0.8	0.0	0.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	1.2	0.0	1.2
Final Form Total	1.2	0.0	1.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	59.29
Aluminum-based Metal/Alloys	12.22
Other Metal/Alloys	0.26
Other Inorganic Materials	0.30
Cellulosics	4.63
Rubber	0.00
Plastics	13.29
Cement	0.00
Solidified Inorganic Material	17.90
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.70
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Cs-137	3.45E+01
Pu-239	2.35E-01
Pu-240	1.41E-01
Sr-90	3.61E+01
Th-230	2.63E-13
Th-232	2.32E-17
U-234	3.81E-09
U-235	4.36E-04
U-236	6.27E-08
U-238	9.05E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D038, F002, F005

TRUCON Code(s)

311

Waste Stream Description

This waste stream consists of 4 55-gallon drums of repackaged waste form 24-inch diameter by 148-inch long carbon steel liners each containing one 1-litre bottle of solidified sample solution from Analytical Laboratory hot cells.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2011
Stream Name	Organic Setups					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1619.5	0.0	1619.5
Box - Misc	38.0	0.0	38.0
Current Form Total	1657.5	0.0	1657.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	268.4	0.0	268.4
TDOP w/ 10 - 55-gal Drums w/ Liners	3280.5	0.0	3280.5
Final Form Total	3548.9	0.0	3548.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	1.45
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.21
Other Inorganic Materials	2.35
Cellulosics	0.02
Rubber	0.14
Plastics	1.24
Cement	0.00
Solidified Inorganic Material	0.05
Solidified Organic Material	126.23
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	17.07
Packaging Material, Rubber	0.44
Packaging Material, Steel	229.60
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	6.62E-03
Am-243	8.85E-10
Cs-137	2.33E-09
Np-237	1.20E-07
Pu-238	7.17E-04
Pu-239	2.46E-02
Pu-240	4.93E-03
Pu-241	3.99E-02
Pu-242	4.88E-07
Sr-90	1.78E-08
Th-229	3.40E-16
Th-230	2.35E-11
Th-232	5.76E-20
U-233	1.96E-12
U-234	6.43E-07
U-235	2.07E-08
U-236	5.84E-10
U-238	9.24E-07

Haz. Waste No(s).

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

TRUCON Code(s)

112/212, 154

Waste Stream Description

This waste consists of various organic liquids that were transferred to Building 774 where they were immobilized using Micro-cel E (a synthetic calcium silicate) to form a grease or paste-like material. The organic liquids were primarily a mixture of oils and chlorinated solvents. Small amounts of Oil-Dri were sometimes added to the mixture as well. This process was shutdown in 1985 and replaced by the OASIS process.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2011
Stream Name	Organic and Sludge Imobilization System Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	25.6	0.0	25.6
Current Form Total	25.6	0.0	25.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	24.6	0.0	24.6
TDOP w/ 10 - 55-gal Drums w/ Liners	36.0	0.0	36.0
Final Form Total	60.6	0.0	60.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.19
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	70.50
Other Inorganic Materials	16.49
Cellulosics	0.00
Rubber	6.48
Plastics	12.17
Cement	2.82
Solidified Inorganic Material	0.00
Solidified Organic Material	2477.82
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.79
Packaging Material, Rubber	0.44
Packaging Material, Steel	223.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.09E-01
Cs-137	2.06E-07
Np-237	1.17E-05
Pu-238	8.00E-02
Pu-239	2.07E+00
Pu-240	4.41E-01
Pu-241	3.71E+00
Pu-242	3.61E-05
Sr-90	2.25E-07
Th-229	5.25E-14
Th-230	1.77E-09
Th-232	8.06E-18
U-233	2.42E-10
U-234	3.91E-05
U-235	1.26E-06
U-236	6.53E-08
U-238	3.71E-06

Haz. Waste No(s).

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

TRUCON Code(s)

112/212, 154

Waste Stream Description

This waste consists of various organic liquids immobilized into a solid monolith by the Organic and Sludge Immobilization System (OASIS) in Building 774.Oil and chlorinated solvent mixtures were the primary liquids treated by OASIS. The organic liquids were immobilized by mixing water, Envirostone emulsifier, accelerator, and gypsum cement. The emulsifier was a polyethylene glycol ether, and the accelerator contained gypsum and potassium sulfate. This waste may also include small amounts of metal and plastic wastes.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Graphite Waste			**Inventory Date**	12/31/2011
Stream Name	Rocky Flats Transuranic Graphite Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	17.5	0.0	17.5
Current Form Total	17.5	0.0	17.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	39.7	0.0	39.7
Final Form Total	39.7	0.0	39.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	2.83
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.19
Other Inorganic Materials	1470.72
Cellulosics	33.90
Rubber	0.31
Plastics	29.82
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.42E+00
Cs-137	2.11E-07
Np-237	4.86E-05
Pu-238	5.95E-01
Pu-239	1.78E+01
Pu-240	4.07E+00
Pu-241	2.56E+01
Pu-242	3.32E-04
Sr-90	2.31E-07
Th-229	1.80E-06
Th-230	4.16E-10
Th-232	7.43E-17
U-233	4.10E-03
U-234	1.33E-05
U-235	2.37E-07
U-236	6.02E-07
U-238	2.21E-05

Haz. Waste No(s).

D008, D029, F001, F002, F005

TRUCON Code(s)

115/215, 154

Waste Stream Description

Waste Stream IN-ID-RF-S5126 is comprised of graphite generated by production, recovery, laboratory, size reduction, and research and development activities associated with plutonium operations at Rocky Flats. .

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Combustible Waste			**Inventory Date**	12/31/2011
Stream Name	Rocky Flats Combustibles and Plastic Stored at INL					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2939.7	0.0	2939.7
Current Form Total	2939.7	0.0	2939.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	340.2	0.0	340.2
TDOP w/ 10 - 55-gal Drums w/ Liners	6354.0	0.0	6354.0
Final Form Total	6694.2	0.0	6694.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	1.78
Aluminum-based Metal/Alloys	0.08
Other Metal/Alloys	0.19
Other Inorganic Materials	2.63
Cellulosics	23.24
Rubber	2.03
Plastics	20.02
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	17.09
Packaging Material, Rubber	0.44
Packaging Material, Steel	230.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.12E-03
Am-243	1.90E-12
Cm-244	5.65E-05
Cs-137	2.34E-09
Np-237	5.03E-07
Pu-238	9.32E-04
Pu-239	3.12E-02
Pu-240	6.97E-03
Pu-241	3.80E-02
Pu-242	6.03E-07
Sr-90	2.56E-09
Th-229	1.70E-08
Th-230	1.11E-10
Th-232	1.27E-19
U-233	3.86E-05
U-234	2.43E-06
U-235	7.64E-08
U-236	1.03E-09
U-238	1.10E-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, 154

Waste Stream Description

Waste stream ID-RF-S5300-A is comprised of combustible and plastic waste items assigned Item IDCs 330, 336, and 337. Contains greater than 80% (by volume), organic combustible and plastic debris

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-ID-SA-T001**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	LRRI CH TRU stored at SNL shipped to AMWTP					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.7	0.0	3.7
Current Form Total	3.7	0.0	3.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.7	0.0	3.7
Final Form Total	3.7	0.0	3.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	69.87
Aluminum-based Metal/Alloys	2.03
Other Metal/Alloys	3.93
Other Inorganic Materials	12.93
Cellulosics	1.28
Rubber	1.92
Plastics	18.43
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	6.87E-02
Cm-244	5.68E-03
Cs-137	1.11E-08
Np-237	1.05E-06
Pu-238	1.61E+00
Pu-239	2.33E-01
Pu-240	2.04E-02
Pu-241	5.79E-02
Pu-242	6.56E-07
Sr-90	1.11E-08
U-234	5.78E-05
U-235	1.83E-06
U-238	1.77E-04

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D019, F005

TRUCON Code(s)

125/225

Waste Stream Description

This waste stream consists of combustible and noncombustible debris waste generated from the preparation of aerosols of TRU isotopes for inhalation studies. The waste includes metals, cellulosics, rubber, plastics, organic matrices, and inorganic materials. It consists of dry, heterogeneous combustible and non-combustible debris.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A
Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	ICP Retrieved Debris Waste (Filters/Graphite)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	633.4	0.0	633.4
SWB Dir Ld w/o Liner	1.9	0.0	1.9
Current Form Total	635.2	0.0	635.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	633.4	0.0	633.4
SWB Dir Ld w/o Liner	1.9	0.0	1.9
Final Form Total	635.3	0.0	635.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	1.41
Aluminum-based Metal/Alloys	0.24
Other Metal/Alloys	0.27
Other Inorganic Materials	233.87
Cellulosics	101.27
Rubber	0.68
Plastics	9.61
Cement	0.92
Solidified Inorganic Material	4.79
Solidified Organic Material	1.11
Soils	20.49
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	36.96
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.84
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	8.43E-01
Cs-137	9.08E-07
Np-237	1.28E-05
Pu-238	7.21E-02
Pu-239	1.99E+00
Pu-240	4.46E-01
Pu-241	2.38E+00
Pu-242	4.58E-05
Sr-90	1.00E-06
Th-232	6.51E-13
U-233	1.17E-05
U-234	2.74E-04
U-235	6.95E-06
U-238	5.41E-04

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, P098, P106

TRUCON Code(s)

112/212, 119/219, 122/222, 127/227, 154

Waste Stream Description

Pre-1970 buried waste retrieved for the Idaho Completion Project

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A
Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	ICP Retrieved Sludge Waste (Inorganic/Organic Sludge/Roaster Oxide)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2424.4	0.0	2424.4
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Current Form Total	2426.3	0.0	2426.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2424.4	0.0	2424.4
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	2426.3	0.0	2426.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.10
Aluminum-based Metal/Alloys	0.01
Other Metal/Alloys	0.02
Other Inorganic Materials	44.62
Cellulosics	0.46
Rubber	0.11
Plastics	0.88
Cement	0.17
Solidified Inorganic Material	191.00
Solidified Organic Material	394.93
Soils	15.87
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.05
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.83
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.00E+00
Cm-244	3.56E-05
Cs-137	1.72E-05
Np-237	2.99E-05
Pu-238	2.69E-02
Pu-239	6.22E-01
Pu-240	1.40E-01
Pu-241	1.19E+00
Pu-242	2.47E-05
Sr-90	1.89E-05
U-233	2.43E-05
U-234	3.60E-04
U-235	9.49E-06
U-238	1.58E-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, P098, P106

TRUCON Code(s)

111/211, 112/212, 122/222, 127/227, 154

Waste Stream Description

Pre-1970 buried waste retrieved for the Idaho Completion Project

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2011
Stream Name	ICP Retrieved Soils					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	476.3	0.0	476.3
Current Form Total	476.3	0.0	476.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	476.3	0.0	476.3
Final Form Total	476.3	0.0	476.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.59
Aluminum-based Metal/Alloys	0.03
Other Metal/Alloys	0.12
Other Inorganic Materials	23.66
Cellulosics	15.00
Rubber	0.34
Plastics	6.32
Cement	0.23
Solidified Inorganic Material	10.85
Solidified Organic Material	5.65
Soils	586.43
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	9.82E-01
Cs-137	1.80E-05
Np-237	1.45E-05
Pu-238	2.82E-02
Pu-239	7.25E-01
Pu-240	1.61E-01
Pu-241	1.09E+00
Pu-242	2.33E-05
Sr-90	1.98E-05
Th-232	4.34E-10
U-233	3.34E-06
U-234	3.18E-04
U-235	4.89E-05
U-238	9.85E-04

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, P098, P106

TRUCON Code(s)

112/212, 122/222, 127/227, 154

Waste Stream Description

Pre-1970 buried waste retrieved for the Idaho Completion Project

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-ID-SNL-HCF-S5400**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Sandia National Laboratories/New Mexico Hot Cell Facility Contact Handled Transuranic Waste (Debris)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.0	0.0	1.0
Current Form Total	1.0	0.0	1.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.0	0.0	1.0
Final Form Total	1.0	0.0	1.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	31.25
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.19
Other Inorganic Materials	3.37
Cellulosics	1.06
Rubber	0.19
Plastics	9.52
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.32E-04
Cs-137	1.66E-03
Pu-238	5.93E-06
Pu-239	8.06E-03
Pu-240	6.30E-04
Sr-90	1.66E-03
U-234	1.96E-05
U-235	6.20E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D019, D022, D028, F002, F005

TRUCON Code(s)

125/225

Waste Stream Description

This waste stream consists of organic and inorganic debris generated during the destructive and nondestructive examinations conducted in the HCF, and includes personal protective equipment and plastic from decontamination and repackaging activities. In addition to the debris materials described above, waste stream ID-SNL-HCF-S5400 will also contain lesser amounts (less than 50 percent in any container) of homogeneous organic and inorganic materials. Clay and vermiculite based absorbents are used during the neutralization and solidification of liquids. Solidifications agents such as Quik Solid and Aquaset were also used to immobilize small amounts of acidic solutions

Waste Stream ID: **IN-MFC-S5490**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Analytical Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	MFC CH-TRU Heterogeneous Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	15.4	0.0	15.4
Current Form Total	15.4	0.0	15.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
TDOP w/ 10 - 55-gal Drums w/o Liners	36.0	0.0	36.0
Final Form Total	36.0	0.0	36.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	13.69
Aluminum-based Metal/Alloys	3.14
Other Metal/Alloys	5.83
Other Inorganic Materials	11.25
Cellulosics	0.00
Rubber	0.00
Plastics	4.78
Cement	0.00
Solidified Inorganic Material	0.89
Solidified Organic Material	2.47
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.44
Packaging Material, Steel	231.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.41E-01
Am-243	5.19E-04
Cm-244	3.71E-03
Cs-137	2.89E-05
Np-237	2.27E-04
Pu-238	3.94E-03
Pu-239	8.67E-02
Pu-240	2.13E-02
Pu-241	4.39E+00
Pu-242	3.83E-06
Sr-90	9.10E-05
Th-229	1.74E-13
Th-230	1.25E-08
Th-232	1.10E-12
U-233	1.97E-09
U-234	3.78E-05
U-235	1.01E-06
U-236	2.12E-07
U-238	7.58E-08

Haz. Waste No(s).

D006, D007, D008, D011

TRUCON Code(s)

125/225

Waste Stream Description

This waste stream consists of solid heterogeneous debris such as glass, metals, ceramics, neutralized and solidified dissolved fuel samples, PPE, paper, rags, and plastic.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	RH TRU Sludge Pan Container waste from Naval Reactor Facility at Idaho Site.					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum	12.9	0.0	12.9
Met Storage Container	0.1	0.0	0.1
Sludge Pan Container	0.5	0.0	0.5
Current Form Total	13.5	0.0	13.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	20.6	0.0	20.6
Final Form Total	20.6	0.0	20.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	170.45
Aluminum-based Metal/Alloys	25.01
Other Metal/Alloys	0.16
Other Inorganic Materials	5.83
Cellulosics	3.39
Rubber	0.13
Plastics	4.30
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.70
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.04E-02
Cs-137	1.16E+01
Np-237	9.92E-09
Pu-238	7.43E-01
Pu-239	2.02E-03
Pu-240	8.83E-04
Pu-241	7.42E-02
Pu-242	2.64E-06
Sr-90	1.08E+01
Th-229	6.45E-07
Th-230	2.51E-08
Th-232	5.81E-21
U-233	2.45E-03
U-234	9.12E-04
U-235	1.43E-06
U-236	7.84E-11
U-238	1.38E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D010, D011

TRUCON Code(s)

321, 322, 325

Waste Stream Description

This waste stream was generated at the Naval Reactors Facility. A total of 89 RH TRU containers were generated by this waste stream [87 Sludge Pan Containers (SPCs) and 2 Metallurgical Storage Containers (MSCs)]. The 87 SPCs have been shipped to INTEC. The 2 MSCs are planned to be shipped to INTEC for processing.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-NRF-SPC-103**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	RH-TRU Debris Waste from the Naval Nuclear Propulsion Program (NNPP)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Can	0.7	0.0	0.7
Current Form Total	0.7	0.0	0.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	27.5	0.0	27.5
Final Form Total	27.5	0.0	27.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	339.09
Aluminum-based Metal/Alloys	49.53
Other Metal/Alloys	0.32
Other Inorganic Materials	11.58
Cellulosics	6.74
Rubber	0.27
Plastics	8.56
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.70
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.97E-01
Cs-137	4.42E+02
Np-237	3.80E-07
Pu-238	2.84E+01
Pu-239	7.75E-02
Pu-240	3.38E-02
Pu-241	2.84E+00
Pu-242	1.01E-04
Sr-90	4.15E+02
Th-229	2.47E-05
Th-230	9.59E-07
Th-232	2.22E-19
U-233	9.35E-02
U-234	3.49E-02
U-235	5.46E-05
U-236	3.00E-09
U-238	5.28E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D010, D011

No TRUCON Codes Provided

Waste Stream Description

This waste stream was generated at NNPP facilities and consists of 103 containers in storage at the INL. Waste was generated during the same or similar process that generated the SPC waste. AK information is being collected to assure the waste stream meets WIPP requirements. Waste stream includes debris waste generated during analysis of post-irradiated nuclear fuel from Naval Reactors programs using destructive examination methods.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-W170**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	D&D Waste Comp. And Comb. Solids					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
Current Form Total	0.4	0.0	0.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
Final Form Total	0.4	0.0	0.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	22.50
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	1.60
Cellulosics	130.30
Rubber	1.50
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.95E+00
Np-237	3.59E-05
Pu-239	2.06E+01
Th-229	1.11E-12
U-233	1.72E-09
U-235	4.46E-07

Haz. Waste No(s).

D004, D006, D008, F003

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at Argonne National Laboratory-East, is derived from decontamination and disposal of facilities and ancillary systems (e.g., gloveboxes)..

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-W171**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Research Generated Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
Box - Misc	3.2	0.0	3.2
Current Form Total	3.6	0.0	3.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.5	0.0	1.5
Final Form Total	1.5	0.0	1.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	2.90
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	2.90
Cellulosics	175.90
Rubber	2.00
Plastics	22.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.49E+00
Am-243	1.70E-03
Np-237	7.46E-06
Pu-239	5.12E+00
Pu-241	1.80E+01
Th-229	1.69E-13
U-233	2.95E-10
U-235	1.11E-07

Haz. Waste No(s).

D004, D006, D008, F003

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at Argonne National Laboratory-East, is derived from research activities performed in a laboratory environment. The waste includes soft plastics, cardboard, rags, paper, and cloth from various processes.

Waste Stream ID: **IN-W259**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Alpha Hot Cell Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	54.1	0.0	54.1
Bin - Misc	21.0	0.0	21.0
Current Form Total	75.1	0.0	75.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
TDOP w/ 10 - 55-gal Drums w/ Liners	139.5	0.0	139.5
Final Form Total	139.5	0.0	139.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	70.99
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.08
Other Inorganic Materials	1.78
Cellulosics	59.70
Rubber	5.35
Plastics	47.89
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	17.13
Packaging Material, Rubber	0.44
Packaging Material, Steel	231.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Pu-239	2.08E-01
Pu-240	2.30E-02
Th-232	8.13E-18
U-235	5.17E-05
U-236	1.50E-08

Haz. Waste No(s).

D008

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at Argonne National Laboratory-East, contains alpha hot cell waste. Noncombustible and combustible wastes are segregated. Sodium in the waste is reacted with ethyl alcohol, mixed with pelletized clay, and dried. Nitrates and oxidizing agents are neutralized or reduced, mixed with peletized clay, and dried to ferrous or ferric salts.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-W283**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Americium Process Residues:					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	24.8	0.0	24.8
Current Form Total	24.8	0.0	24.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	24.8	0.0	24.8
Final Form Total	24.8	0.0	24.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	156.33
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	126.83
Cellulosics	13.27
Rubber	0.00
Plastics	80.52
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.29E+00
Np-237	1.05E-05
Pu-238	2.09E-01
Pu-239	7.99E+00
Pu-240	1.81E+00
Pu-241	7.70E+00
Pu-242	1.31E-04
Th-229	5.93E-13
Th-230	4.79E-09
Th-232	1.92E-15
U-233	6.56E-10
U-234	2.61E-05
U-235	2.99E-07
U-236	2.04E-06
U-238	7.71E-13

Haz. Waste No(s).

D008, F002, F003

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at the Rocky Flats Plant, consists of piping, flanges, valves, tools, equipment, PVC piping, glassware (flasks ion exchange columns), glass filters, PE bottles, leaded glovebox gloves, paper, and plastics. Some of the containers are lead-lined.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-W287**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Cut-Up Gloveboxes					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Bin - Misc	234.5	0.0	234.5
Box - Misc	15.9	0.0	15.9
Current Form Total	250.4	0.0	250.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	87.8	0.0	87.8
Final Form Total	87.8	0.0	87.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	169.25
Aluminum-based Metal/Alloys	27.15
Other Metal/Alloys	12.54
Other Inorganic Materials	30.88
Cellulosics	45.09
Rubber	0.48
Plastics	4.52
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	6.35E-03
Np-237	6.26E-04
Pu-239	2.05E-01
Pu-240	2.43E+00
Pu-241	7.84E-02
Th-229	5.77E-11
Th-230	2.93E-13
Th-232	8.61E-16
U-233	5.96E-08
U-234	2.90E-09
U-235	1.43E-08
U-236	1.59E-06
U-238	4.69E-05

Haz. Waste No(s).

D008

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at Argonne National Laboratory-East, contains glovebox sections and associated equipment from decontamination and decommissioning operations. This waste is predominantly noncombustible

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-W323**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Combustible Lab Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

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

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	15.1	0.0	15.1
Final Form Total	15.1	0.0	15.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	12.15
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.86
Cellulosics	70.39
Rubber	0.79
Plastics	7.03
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.28E-02
Np-237	1.38E-07
Pu-238	6.03E-01
Pu-239	1.32E-01
Pu-241	5.32E-01
Th-229	2.43E-15
Th-230	4.26E-09
U-233	4.77E-12
U-234	4.09E-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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-W337**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Source Information Not Compiled	**Waste Matrix Code Group**	Inorganic Nonmetal Waste			**Inventory Date**	12/31/2011
Stream Name	Sources					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	139.10
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Pu-239	1.46E+01
Pu-240	3.03E+00
Th-232	1.07E-15
U-235	3.96E-04
U-236	1.97E-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 a neutron source. No other wastes were included in the drum."

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-W345**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	TRU Scrap					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	4.0	0.0	4.0
Box - Misc	3.2	0.0	3.2
Current Form Total	7.1	0.0	7.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	7.1	0.0	7.1
Final Form Total	7.1	0.0	7.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	96.20
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.10
Other Inorganic Materials	2.40
Cellulosics	80.90
Rubber	7.30
Plastics	64.90
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.75E+00
Np-237	4.17E-05
Pu-238	1.40E+00
Pu-239	1.35E+00
Pu-240	8.57E-01
Th-229	1.29E-12
Th-230	9.90E-09
Th-232	3.91E-05
U-233	2.00E-09
U-234	9.51E-05
U-235	1.79E-05
U-236	5.59E-07

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at the Idaho Engineering Laboratory, consists of a plastic glovebox, hydraulic pump containing oil, vacuum pumps, centrifuges, tools and experimental fuel capsules.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-W347**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Absorbed Liquids					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	21.8	0.0	21.8
Bin - Misc	45.5	0.0	45.5
Current Form Total	67.3	0.0	67.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	38.1	0.0	38.1
Final Form Total	38.1	0.0	38.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	54.88
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	117.54
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.61E+00
Cs-137	4.56E-06
Np-237	3.36E-05
Pu-238	2.06E-01
Pu-239	3.05E+00
Pu-240	9.77E-01
Pu-241	7.45E+00
Pu-242	1.08E-04
Sr-90	5.00E-06
Th-229	2.52E-14
Th-230	7.24E-10
Th-232	2.85E-18
U-233	2.88E-10
U-234	3.99E-05
U-235	9.33E-06
U-236	5.78E-08
U-238	1.59E-04

Haz. Waste No(s).

F003

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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-W351**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Empty Bottles and Absorbent					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.5	0.0	1.5
Current Form Total	1.5	0.0	1.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.5	0.0	1.5
Final Form Total	1.5	0.0	1.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	3.40
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	3.40
Cellulosics	202.10
Rubber	2.30
Plastics	25.30
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.41E+00
Np-237	1.40E-05
Pu-238	1.74E-01
Pu-239	1.66E+00
Pu-240	8.69E-01
Pu-241	8.23E+00
Pu-242	2.90E-04
Th-229	1.03E-14
Th-230	9.14E-12
Th-232	2.54E-18
U-233	1.18E-10
U-234	9.91E-07
U-235	3.27E-09
U-236	5.15E-08
U-238	9.01E-14

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at Argonne National Laboratory-East, consists of polyethylene and glass bottles used to collect liquid waste are emptied and filled with vermiculite to absorb any remaining liquid. The tops were replaced to contain the liquid. No free liquids should be present, except for small quantities of wet vermiculite.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-W358**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Uncategorized Metal Waste			**Inventory Date**	12/31/2011
Stream Name	PU Neutron Sources					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.2	0.0	1.2
Bin - Misc	3.5	0.0	3.5
Current Form Total	4.7	0.0	4.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2.5	0.0	2.5
Final Form Total	2.5	0.0	2.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	48.10
Aluminum-based Metal/Alloys	0.40
Other Metal/Alloys	0.05
Other Inorganic Materials	1.20
Cellulosics	40.45
Rubber	3.65
Plastics	32.45
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Pu-238	2.93E+02
Pu-239	1.51E+00
Pu-240	2.90E+00
Th-230	1.06E-06
Th-232	5.42E-16
U-234	1.41E-02
U-235	2.38E-08
U-236	1.37E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream was generated at the INEL [NTEC (formerly CPP), NRF, and TAN]. This wastes includes Pu-Be sources, Pu standard, Pu foil, tools, and non-combustible waste.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **KA-T001**

Appendix A

Waste Profile Report

Site	Knolls Atomic Power Laboratory - Schenectady	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Transuranic Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Can	0.0	0.1	0.1
Current Form Total	0.0	0.1	0.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	0.0	12.5	12.5
Final Form Total	0.0	12.5	12.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	1.87
Aluminum-based Metal/Alloys	0.01
Other Metal/Alloys	0.00
Other Inorganic Materials	0.05
Cellulosics	1.54
Rubber	0.14
Plastics	1.24
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	8.97E-04
Am-243	1.34E-07
Cm-244	5.48E-04
Cs-137	2.36E+00
Np-237	6.86E-06
Pu-238	3.94E-02
Pu-239	6.11E-05
Pu-240	4.92E-05
Pu-241	1.58E-02
Pu-242	3.10E-07
Pu-244	4.34E-15
Sr-90	2.36E+00
Th-229	2.34E-12
Th-230	3.40E-09
Th-232	1.05E-13
U-233	9.76E-10
U-234	4.54E-05
U-235	9.54E-07
U-236	9.21E-06
U-238	3.66E-09

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

Waste Stream Description

Organic and inorganic particulate and debris.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **KA-W016**

Appendix A

Waste Profile Report

Site	Knolls Atomic Power Laboratory - Schenectady	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Transuranic Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Can	0.0	0.0	0.0
Current Form Total	0.0	0.0	0.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	0.0	0.6	0.6
Final Form Total	0.0	0.6	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	18.73
Aluminum-based Metal/Alloys	0.11
Other Metal/Alloys	0.02
Other Inorganic Materials	0.46
Cellulosics	15.43
Rubber	1.39
Plastics	12.38
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.03E-04
Am-243	1.32E-06
Cm-244	1.86E-04
Cs-137	8.01E-01
Np-237	2.32E-06
Pu-238	1.34E-02
Pu-239	2.07E-05
Pu-240	1.67E-05
Pu-241	5.34E-03
Pu-242	1.05E-07
Pu-244	4.30E-14
Sr-90	8.01E-01
Th-229	2.32E-11
Th-230	3.37E-08
Th-232	1.04E-12
U-233	9.67E-09
U-234	1.54E-05
U-235	3.22E-07
U-236	3.11E-06
U-238	1.24E-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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **KN-B234TRU**

Appendix A

Waste Profile Report

Site	Knolls Atomic Power Laboratory - Nuclear Fuel Services	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Building 234 TRU Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	4.8	0.0	4.8
Box - Crate	28.0	0.0	28.0
Uncontained	0.0	293.5	293.5
Current Form Total	32.8	293.5	326.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	30.2	293.5	323.6
Final Form Total	30.2	293.5	323.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	35.81
Aluminum-based Metal/Alloys	2.60
Other Metal/Alloys	0.00
Other Inorganic Materials	33.49
Cellulosics	5.11
Rubber	0.30
Plastics	31.50
Cement	0.00
Solidified Inorganic Material	600.13
Solidified Organic Material	0.00
Soils	1601.46
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.48E+00
Np-237	7.07E-06
Pu-238	2.70E-01
Pu-239	8.69E+00
Pu-240	8.68E+00
Pu-241	8.34E+00
Th-229	2.46E-05
Th-230	4.83E-03
Th-232	1.61E-03
U-233	3.11E-02
U-234	3.11E-02
U-235	5.90E-03
U-236	5.90E-03
U-238	7.62E-04

No Hazardous Waste Numbers Provided

TRUCON Code(s)

111/211, 125/225

Waste Stream Description

This waste is non-hazardous soil and debris from Building 234 decommissioning. The majority of the waste to be generated, estimated 90%, will be soil. All process equipment and glove boxes were removed in the early 1990s and are not part of this waste stream. The remaining 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. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-CIN01.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Cemented TRU Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
110-gal Drum w/ 1 - 55-gal Drum w/ Liner	5.1	0.0	5.1
55-gal Drum Dir Ld w/ Liner	376.3	91.5	467.8
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	252.0	0.0	252.0
Cask - Misc w/ 1 - 30-gal Drum	4.4	0.0	4.4
Cask - Misc w/ 2 - 30-gal Drums	0.8	0.0	0.8
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Current Form Total	640.5	91.5	732.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	554.7	91.5	646.3
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Final Form Total	556.6	91.5	648.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	32.62
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	5.80
Cement	912.59
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	36.96
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.84
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.73E+01
Am-243	7.28E-04
Cs-137	9.94E-04
Np-237	6.94E-05
Pu-238	4.45E+00
Pu-239	1.65E+01
Pu-240	4.41E+00
Pu-241	7.17E+01
Pu-242	5.54E-03
Pu-244	1.32E-09
Sr-90	9.87E-04
Th-229	7.07E-08
Th-230	3.27E-08
Th-232	4.19E-06
U-233	1.75E-04
U-234	9.13E-04
U-235	1.72E-05
U-236	1.24E-06
U-238	5.68E-04

Haz. Waste No(s).

D006, D007, D008, D011, D019, D021, D039, F001, F002, F003

TRUCON Code(s)

114/214, 126/226

Waste Stream Description

Solidified homogenous solid waste(cemented TRU waste) generated TA-55 R&D/fabrication and associated recovery, facility and equipment maintenance, D&D, waste repackaging, and below-grade retrieval operations.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-CIN02.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Cemented TRU Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
110-gal Drum w/ 1 - 55-gal Drum w/ Liner	4.6	0.0	4.6
55-gal Drum Dir Ld w/ Liner	21.8	68.6	90.5
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	12.6	0.0	12.6
SWB w/ 4 - 55-gal Drums w/ Liners	144.4	0.0	144.4
Current Form Total	183.4	68.6	252.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	32.7	68.6	101.3
SWB w/ 4 - 55-gal Drums w/ Liners	143.6	0.0	143.6
Final Form Total	176.3	68.6	244.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.67
Cement	670.83
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	24.89
Packaging Material, Rubber	0.49
Packaging Material, Steel	177.88
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.50E+00
Am-243	2.55E-06
Cs-137	1.11E-03
Np-237	1.22E-05
Pu-238	3.35E-01
Pu-239	3.56E+00
Pu-240	1.19E-01
Pu-241	1.21E+00
Pu-242	2.02E-05
Sr-90	3.05E-05
Th-229	8.52E-15
Th-230	1.67E-09
Th-232	4.88E-19
U-233	9.93E-11
U-234	9.17E-05
U-235	1.61E-05
U-236	8.46E-09
U-238	3.73E-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

Homogeneous cemented inorganics generated in the TA-50-01 RLWTF pretreatment process.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-CIN03.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Cemented TRU Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

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	1.6	0.0	1.6
Current Form Total	3.9	0.0	3.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.3	0.0	3.3
Final Form Total	3.3	0.0	3.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.05
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	1.77
Cement	588.45
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.96E-01
Cs-137	8.92E-05
Np-237	1.08E-06
Pu-238	6.68E-02
Pu-239	1.09E+00
Pu-240	2.36E-01
Pu-241	3.80E+00
Pu-242	3.23E-05
Sr-90	8.87E-05
Th-229	1.79E-07
Th-230	2.94E-09
Th-232	2.76E-18
U-233	1.62E-11
U-234	8.02E-05
U-235	1.80E-06
U-236	2.80E-08
U-238	3.17E-05

Haz. Waste No(s).

D007, D019, F001, F002

TRUCON Code(s)

114/214, 126/226

Waste Stream Description

Cemented TRU waste generated in the CMR during facility and equipment operations and maintenance processes.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-LAMHD02238**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Heterogeneous Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
Current Form Total	0.4	0.0	0.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
Final Form Total	0.4	0.0	0.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	43.14
Aluminum-based Metal/Alloys	0.17
Other Metal/Alloys	5.17
Other Inorganic Materials	27.98
Cellulosics	3.57
Rubber	5.36
Plastics	16.52
Cement	0.00
Solidified Inorganic Material	0.69
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.70E-02
Pu-238	3.77E+01
Pu-239	2.24E-02
Pu-240	1.13E-02
Pu-241	8.67E-01
Pu-242	9.30E-06
U-234	4.24E-03
U-235	1.13E-09

Haz. Waste No(s).

D005, D006, D007, D008, D009, D010, D011

TRUCON Code(s)

125/225, 154

Waste Stream Description

Mixed heterogeneous debris waste generated during TA-55 R&D/fabrication and associated recovery, facility and equipment maintenance, decontamination and decomissioning(D&D), waste repackaging, and below-grade retrieval operations.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-LAMHD04001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Heterogeneous Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Current Form Total	1.9	0.0	1.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	39.47
Aluminum-based Metal/Alloys	15.05
Other Metal/Alloys	30.26
Other Inorganic Materials	8.60
Cellulosics	25.65
Rubber	19.81
Plastics	14.75
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.20
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.44
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.92E-04
Cs-137	2.66E-04
Pu-238	1.08E-04
Pu-239	2.16E-02
Sr-90	3.93E-05
U-234	2.33E-05
U-235	1.26E-06
U-238	2.44E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225, 154

Waste Stream Description

Mixed heterogeneous combustible and non-combustible debris.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-LAMIN04S**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Salt Waste			**Inventory Date**	12/31/2011
Stream Name	INORGANIC HOMOGENEOUS WASTE					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.5	0.0	1.5
55-gal POC - 12" w/ Liner	0.4	0.0	0.4
Current Form Total	1.9	0.0	1.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.5	0.0	1.5
55-gal POC - 12" w/ Liner	0.4	0.0	0.4
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	10.88
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.67
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	5.70
Cement	0.00
Solidified Inorganic Material	34.55
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	30.02
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	219.23
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	8.42E+00
Pu-238	1.06E+00
Pu-239	3.59E+01
Pu-240	8.39E+00
Pu-241	1.27E+02
Pu-242	4.86E-04
U-234	7.67E-05
U-235	1.33E-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)

124/224

Waste Stream Description

INORGANIC HOMOGENEOUS WASTE

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-LAMSG04001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Spill Clean-ups/Emergency Response Actions	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Contaminated Soil					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	34.2	0.0	34.2
Current Form Total	34.2	0.0	34.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	34.0	0.0	34.0
Final Form Total	34.0	0.0	34.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.06
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.06
Cement	0.00
Solidified Inorganic Material	0.20
Solidified Organic Material	0.00
Soils	656.33
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.20
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.44
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.97E-03
Cs-137	1.40E-03
Pu-238	9.40E-04
Pu-239	1.66E-01
Sr-90	3.42E-04
U-234	9.98E-05
U-235	1.14E-05
U-238	4.79E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)

111/211

Waste Stream Description

Mixed contaminated soil generated during D&D, sampling activities, and nonstandard events such as the cleanup of spills at the TA-21 DP West Facility.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-LANHD01**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Heterogeneous Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current 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	1.9	0.0	1.9
Current Form Total	2.9	0.0	2.9

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	1.9	0.0	1.9
Final Form Total	2.9	0.0	2.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	180.38
Aluminum-based Metal/Alloys	0.73
Other Metal/Alloys	21.62
Other Inorganic Materials	116.98
Cellulosics	14.93
Rubber	22.39
Plastics	69.06
Cement	0.00
Solidified Inorganic Material	2.87
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	13.93
Packaging Material, Rubber	0.33
Packaging Material, Steel	145.39
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.32E+00
Pu-238	4.06E-01
Pu-239	1.02E+01
Pu-240	2.55E+00
Pu-241	4.12E+01
Pu-242	1.99E-04
U-234	3.07E-05
U-235	3.69E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s)

117/217, 125/225, 154

Waste Stream Description

Heterogeneous debris waste generated during plutonium recovery, fabrication, R&D, facility and equipment operations, and maintenance processes.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-LANHD02238**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	NON-MIXED HETEROGENEOUS DEBRIS WASTE, PU238					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Current Form Total	0.6	0.0	0.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	28.34
Aluminum-based Metal/Alloys	0.11
Other Metal/Alloys	3.40
Other Inorganic Materials	18.38
Cellulosics	2.34
Rubber	3.52
Plastics	10.85
Cement	0.00
Solidified Inorganic Material	0.45
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	9.63E-02
Pu-238	1.34E+02
Pu-239	8.00E-02
Pu-240	4.03E-02
Pu-241	3.09E+00
Pu-242	3.31E-05
U-234	1.51E-02
U-235	4.04E-09

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225, 154

Waste Stream Description

NON-MIXED HETEROGENEOUS DEBRIS WASTE, PU238

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-LANIN03NC**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Salt Waste			**Inventory Date**	12/31/2011
Stream Name	NON-CEMENTED SOLID INORGANIC (HOMOGENEOUS)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
55-gal POC - 12" w/ Liner	0.6	0.0	0.6
Current Form Total	1.0	0.0	1.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
55-gal POC - 12" w/ Liner	0.6	0.0	0.6
Final Form Total	1.0	0.0	1.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.13
Cement	0.00
Solidified Inorganic Material	23.64
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	81.06
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	369.62
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.77E+01
Pu-238	9.00E-01
Pu-239	3.06E+01
Pu-240	7.15E+00
Pu-241	1.09E+02
Pu-242	4.14E-04
U-234	6.54E-05
U-235	1.13E-06

No Hazardous Waste Numbers Provided

TRUCON Code(s)

111/211, 124/224

Waste Stream Description

NON-CEMENTED SOLID INORGANIC (HOMOGENEOUS)

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MHD01.001**

Appendix A
Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Heterogeneous Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
110-gal Drum w/ 1 - 55-gal Drum w/ Liner	1.0	0.0	1.0
55-gal Drum Dir Ld w/ Liner	255.7	2654.1	2909.8
55-gal POC - 12" w/ Liner	80.1	0.0	80.1
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	126.9	0.0	126.9
Box - Crate	177.7	0.0	177.7
Box - FRP	196.4	0.0	196.4
Cask - Misc w/ 1 - 30-gal Drum	65.6	0.0	65.6
Cask - Misc w/ 2 - 30-gal Drums	4.0	0.0	4.0
Other	364.5	0.0	364.5
SWB Dir Ld w/ Liner	267.9	125.4	393.3
SWB w/ 4 - 55-gal Drums w/ Liners	47.5	0.0	47.5
Current Form Total	1587.4	2779.5	4366.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	488.0	2654.1	3142.0
55-gal POC - 12" w/ Liner	80.1	0.0	80.1
SWB Dir Ld w/ Liner	1005.5	124.7	1130.2
SWB w/ 4 - 55-gal Drums w/ Liners	47.3	0.0	47.3
Final Form Total	1620.8	2778.8	4399.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	76.20
Aluminum-based Metal/Alloys	0.31
Other Metal/Alloys	9.13
Other Inorganic Materials	49.42
Cellulosics	6.31
Rubber	9.46
Plastics	29.18
Cement	0.00
Solidified Inorganic Material	1.21
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	2.46
Packaging Material, Plastic	27.63
Packaging Material, Rubber	0.47
Packaging Material, Steel	144.70
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.26E+00
Am-243	9.62E-05
Cm-244	1.84E-02
Cs-137	9.73E-05
Np-237	4.25E-05
Pu-238	1.18E+01
Pu-239	5.13E+00
Pu-240	1.39E+00
Pu-241	1.82E+01
Pu-242	2.53E-03
Pu-244	7.84E-10
Sr-90	9.70E-05
Th-229	3.31E-08
Th-230	2.51E-08
Th-232	6.83E-11
U-233	1.18E-04
U-234	1.40E-03
U-235	1.21E-06
U-236	1.23E-07
U-238	2.16E-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)

112/212, 115/215, 116/216, 117/217, 118/218, 119/219, 122/222, 124/224, 125/225, 154

Waste Stream Description

Mixed heterogeneous debris waste generated during TA-55 R&D/fabrication and associated recovery, facility and equipment maintenance, decontamination and decomissioning(D&D), waste repackaging, and below-grade retrieval operations.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MHD03.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Heterogeneous Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

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	4.6	0.0	4.6
55-gal Drum Dir Ld w/ Liner	95.4	137.3	232.7
55-gal POC - 12" w/ Liner	0.4	0.0	0.4
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	21.3	0.0	21.3
Box - Crate	43.7	0.0	43.7
Cask - Misc w/ 1 - 30-gal Drum	0.8	0.0	0.8
Other	7.7	0.0	7.7
SWB Dir Ld w/ Liner	79.8	0.0	79.8
Current Form Total	254.5	137.3	391.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	115.2	137.3	252.5
55-gal POC - 12" w/ Liner	0.4	0.0	0.4
SWB Dir Ld w/ Liner	130.4	0.0	130.4
Final Form Total	246.1	137.3	383.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	30.81
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	10.08
Other Inorganic Materials	48.87
Cellulosics	39.37
Rubber	3.99
Plastics	115.58
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.77
Vitrified	0.00
Packaging Material, Cellulosics	0.15
Packaging Material, Plastic	24.87
Packaging Material, Rubber	0.44
Packaging Material, Steel	138.91
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.31E-01
Am-243	9.71E-05
Cm-244	5.96E-01
Cs-137	1.03E-02
Np-237	2.69E-04
Pu-238	1.84E+00
Pu-239	5.05E-01
Pu-240	1.39E-01
Pu-241	2.19E+00
Pu-242	4.01E-05
Pu-244	1.49E-11
Sr-90	8.84E-03
Th-229	2.74E-09
Th-230	7.83E-09
Th-232	4.37E-18
U-233	3.51E-09
U-234	2.92E-04
U-235	8.57E-06
U-236	3.57E-08
U-238	2.73E-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, F003, F004, F005

TRUCON Code(s)

116/216, 117/217, 118/218, 119/219, 125/225, 154

Waste Stream Description

Mixed heterogeneous combustible and non-combustible debris.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MHD04.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Heterogeneous Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
110-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.4	0.0	0.4
30-gal Drum	0.1	0.0	0.1
55-gal Drum Dir Ld w/ Liner	1.2	0.0	1.2
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	2.2	0.0	2.2
Box - Crate	925.9	0.0	925.9
Box - FRP	479.6	0.0	479.6
Other	146.3	0.0	146.3
SWB Dir Ld w/ Liner	26.6	0.0	26.6
Current Form Total	1582.3	0.0	1582.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.1	0.0	3.1
SWB Dir Ld w/ Liner	1578.2	0.0	1578.2
Final Form Total	1581.3	0.0	1581.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	20.59
Aluminum-based Metal/Alloys	7.85
Other Metal/Alloys	15.79
Other Inorganic Materials	4.49
Cellulosics	13.38
Rubber	10.34
Plastics	7.69
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.27
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.39
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.06E-02
Am-243	1.74E-09
Cs-137	1.63E-06
Np-237	3.10E-07
Pu-238	1.80E+00
Pu-239	2.97E-01
Pu-240	1.78E-02
Pu-241	1.87E-01
Pu-242	4.30E-07
Sr-90	1.62E-06
Th-229	8.73E-16
Th-230	2.00E-09
Th-232	2.08E-19
U-233	5.03E-12
U-234	6.47E-05
U-235	2.86E-08
U-236	2.10E-09
U-238	2.67E-16

Haz. Waste No(s).

D004, D006, D007, D008, D009, F001, F002

TRUCON Code(s)

117/217, 125/225, 154

Waste Stream Description

Mixed heterogeneous combustible and non-combustible debris.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MHD05-ITRI.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Heterogeneous Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	6.0	0.0	6.0
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 Dir Ld w/ Liner	1.9	0.0	1.9
Current Form Total	8.5	0.0	8.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	6.2	0.0	6.2
55-gal POC - 12" w/ Liner	0.2	0.0	0.2
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Final Form Total	8.3	0.0	8.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	127.96
Aluminum-based Metal/Alloys	3.96
Other Metal/Alloys	7.68
Other Inorganic Materials	19.08
Cellulosics	3.96
Rubber	6.28
Plastics	6.28
Cement	0.00
Solidified Inorganic Material	51.18
Solidified Organic Material	6.28
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	3.37
Packaging Material, Plastic	28.94
Packaging Material, Rubber	0.48
Packaging Material, Steel	145.84
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.58E+00
Am-243	3.41E-03
Cm-244	1.56E+00
Cs-137	2.54E-07
Np-237	1.90E-06
Pu-238	4.85E+00
Pu-239	4.04E-01
Pu-240	3.28E-02
Pu-241	5.42E-01
Pu-242	3.79E-06
Sr-90	2.54E-07
Th-229	2.57E-16
Th-230	1.07E-09
Th-232	2.39E-20
U-233	6.46E-12
U-234	1.24E-04
U-235	3.98E-10
U-236	9.68E-10
U-238	5.88E-16

Haz. Waste No(s).

D008

TRUCON Code(s)

125/225, 154

Waste Stream Description

Mixed CH-TRU waste stored at LANL resulting from the preparation of aerosols of TRU isotopes for inhalation studies performed at the LRRI.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MHD08.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Heterogeneous Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2.1	0.0	2.1
55-gal POC - 12" w/ Liner	0.2	0.0	0.2
Current Form Total	2.3	0.0	2.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2.1	0.0	2.1
55-gal POC - 12" w/ Liner	0.2	0.0	0.2
Final Form Total	2.3	0.0	2.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	7.95
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	2.65
Other Inorganic Materials	12.82
Cellulosics	10.29
Rubber	1.05
Plastics	30.28
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	12.28
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	166.96
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.51E-01
Am-243	3.82E-03
Cm-244	1.54E-05
Cs-137	2.43E-05
Np-237	1.30E-03
Pu-238	4.31E-02
Pu-239	1.23E-01
Pu-240	1.93E-02
Pu-241	1.55E-01
Pu-242	4.37E-02
Sr-90	2.42E-05
Th-229	9.98E-13
Th-230	2.26E-12
Th-232	4.81E-08
U-233	1.13E-08
U-234	2.45E-07
U-235	2.42E-10
U-236	1.14E-09
U-238	1.36E-11

Haz. Waste No(s).

D008, D011

TRUCON Code(s)

111/211, 116/216, 125/225, 154

Waste Stream Description

Mixed heterogeneous combustible and non-combustible debris generated during plutonium and uranium R&D processes in the Alpha Facility.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MHD09.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Heterogeneous Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2.3	0.0	2.3
55-gal POC - 12" w/ Liner	0.2	0.0	0.2
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	1.6	0.0	1.6
Other	29.6	0.0	29.6
SWB Dir Ld w/ Liner	25.4	0.0	25.4
Current Form Total	59.1	0.0	59.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.3	0.0	3.3
55-gal POC - 12" w/ Liner	0.2	0.0	0.2
SWB Dir Ld w/ Liner	56.7	0.0	56.7
Final Form Total	60.2	0.0	60.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	148.07
Aluminum-based Metal/Alloys	53.90
Other Metal/Alloys	54.71
Other Inorganic Materials	6.01
Cellulosics	11.07
Rubber	10.21
Plastics	11.19
Cement	0.00
Solidified Inorganic Material	2.47
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.47
Packaging Material, Plastic	3.31
Packaging Material, Rubber	0.21
Packaging Material, Steel	153.48
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.55E+00
Am-243	1.36E-04
Cs-137	1.16E-03
Np-237	9.75E-05
Pu-238	2.04E+00
Pu-239	2.69E-01
Pu-240	5.43E-02
Pu-241	9.19E-01
Pu-242	1.71E-05
Sr-90	1.65E-05
Th-229	7.32E-14
Th-230	5.76E-09
Th-232	1.59E-19
U-233	8.37E-10
U-234	3.19E-04
U-235	4.29E-07
U-236	3.21E-09
U-238	8.63E-07

Haz. Waste No(s).

D007, D008, D009, F001

TRUCON Code(s)

116/216, 117/217, 125/225, 154

Waste Stream Description

Mixed heterogeneous combustible and non-combustible debris from the TA-50-01 RLWTF, TA-50-37 CAI, and TA-50-69 WCRR Facility generated during facility and equipment maintenance, decontamination and decommissioning (D&D), and waste repackaging activities.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MIN02-V.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2011
Stream Name	Absorbed Liquid Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	7.5	0.0	7.5
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	1.3	0.0	1.3
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Current Form Total	10.7	0.0	10.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	8.3	0.0	8.3
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Final Form Total	10.2	0.0	10.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	11.65
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	4.28
Cellulosics	0.00
Rubber	0.00
Plastics	18.26
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	92.86
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	30.43
Packaging Material, Rubber	0.50
Packaging Material, Steel	134.97
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.33E-01
Am-243	1.35E-05
Cs-137	5.05E-06
Np-237	4.76E-05
Pu-238	4.06E+00
Pu-239	2.80E+00
Pu-240	7.07E-01
Pu-241	8.19E+00
Pu-242	6.23E-05
Sr-90	5.03E-06
Th-229	8.16E-14
Th-230	3.86E-09
Th-232	4.65E-18
U-233	6.19E-10
U-234	1.57E-04
U-235	3.46E-06
U-236	6.28E-08
U-238	1.29E-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)

112/212

Waste Stream Description

Inorganic particulate waste generated during TA-55 R&D/fabrication and associated recovery, facility and equipment maintenance, D&D, waste repackaging, and below-grade retrieval operations.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MIN03-NC.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Homogeneous Inorganic Solids					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
110-gal Drum w/ 1 - 55-gal Drum w/ Liner	2.0	0.0	2.0
55-gal Drum Dir Ld w/ Liner	33.6	0.0	33.6
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	63.1	0.0	63.1
Current Form Total	98.7	0.0	98.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	74.3	0.0	74.3
Final Form Total	74.3	0.0	74.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.08
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.08
Cellulosics	0.00
Rubber	0.00
Plastics	4.42
Cement	0.00
Solidified Inorganic Material	829.20
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.15E-01
Am-243	2.60E-06
Cs-137	9.36E-06
Np-237	1.41E-06
Pu-238	1.11E-01
Pu-239	4.36E-01
Pu-240	2.07E-02
Pu-241	3.71E-01
Pu-242	1.49E-06
Sr-90	9.30E-06
Th-229	4.46E-08
Th-230	9.24E-10
Th-232	7.50E-19
U-233	1.94E-11
U-234	2.58E-05
U-235	8.58E-07
U-236	5.02E-09
U-238	1.14E-06

Haz. Waste No(s).

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

TRUCON Code(s)

111/211, 122/222, 125/225

Waste Stream Description

Homogeneous dewatered sludge generated in the TA-50-01 RLWTF main treatment process.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MIN04-S.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Salt Waste			**Inventory Date**	12/31/2011
Stream Name	Salt Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	13.1	0.0	13.1
55-gal POC - 12" w/ Liner	1.0	0.0	1.0
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.3	0.0	0.3
Current Form Total	14.5	0.0	14.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	13.3	0.0	13.3
55-gal POC - 12" w/ Liner	1.0	0.0	1.0
Final Form Total	14.4	0.0	14.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	15.70
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.97
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	8.23
Cement	0.00
Solidified Inorganic Material	49.87
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	9.79
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	159.62
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.77E+00
Am-243	1.65E-03
Cm-244	2.93E-02
Cs-137	6.67E-05
Np-237	1.53E-04
Pu-238	1.59E+00
Pu-239	3.41E+01
Pu-240	8.60E+00
Pu-241	6.82E+01
Pu-242	7.04E-04
Sr-90	6.66E-05
Th-229	2.91E-14
Th-230	9.22E-10
Th-232	6.28E-18
U-233	6.63E-10
U-234	1.03E-04
U-235	2.44E-06
U-236	2.55E-07
U-238	1.09E-13

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)

124/224, 125/225

Waste Stream Description

Inorganic homogeneous solid waste generated during TA-55 R&D/fabrication and associated recovery, facility and equipment maintenance, D&D, waste repackaging, and below-grade retrieval operations.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MSG04.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Spill Clean-ups/Emergency Response Actions	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Contaminated Soil					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	10.0	0.0	10.0
Box - Crate	23.8	0.0	23.8
SWB Dir Ld w/ Liner	3.8	0.0	3.8
Current Form Total	37.6	0.0	37.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	10.0	0.0	10.0
SWB Dir Ld w/ Liner	28.4	0.0	28.4
Final Form Total	38.3	0.0	38.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.05
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.05
Cement	0.00
Solidified Inorganic Material	0.16
Solidified Organic Material	0.00
Soils	527.64
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	10.54
Packaging Material, Rubber	0.29
Packaging Material, Steel	147.53
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.48E-02
Cs-137	3.27E-08
Np-237	5.16E-07
Pu-238	5.48E-06
Pu-239	2.86E-01
Pu-240	4.92E-04
Pu-241	4.15E-03
Pu-242	7.80E-07
Pu-244	4.57E-06
Sr-90	1.80E-07
U-233	1.35E-07
U-234	1.35E-07
U-238	3.55E-08

No Hazardous Waste Numbers Provided

TRUCON Code(s)

111/211, 125/225

Waste Stream Description

Mixed contaminated soil generated during D&D, sampling activities, and nonstandard events such as the cleanup of spills at the TA-21 DP West Facility.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-OS-00-01.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Uncategorized Metal Waste			**Inventory Date**	12/31/2011
Stream Name	Metal debris from Off-Site Source Recovery (OSR) project					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal POC - 12" w/ Liner	8.3	0.0	8.3
55-gal POC - 6" w/ Liner	38.9	0.0	38.9
Current Form Total	47.2	0.0	47.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal POC - 12" w/ Liner	8.3	0.0	8.3
55-gal POC - 6" w/ Liner	38.9	0.0	38.9
Final Form Total	47.2	0.0	47.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	24.57
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	4.34
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	200.84
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	357.36
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.82E+01
Cm-244	6.19E+01
Cs-137	8.25E-02
Np-237	5.08E-05
Pu-238	1.66E+01
Pu-240	3.33E-01
Pu-242	4.40E-08
Th-229	1.30E-14
Th-230	8.72E-10
Th-232	9.47E-19
U-233	2.21E-10
U-234	9.45E-05
U-236	1.93E-08
U-238	6.82E-18

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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-00-01**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Containers waiting assignment to waste streams					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	8.5	0.0	8.5
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	1.0	0.0	1.0
Box - Crate	113.1	0.0	113.1
Other	5.7	0.0	5.7
Current Form Total	128.3	0.0	128.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	9.2	0.0	9.2
SWB Dir Ld w/ Liner	119.1	0.0	119.1
Final Form Total	128.2	0.0	128.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	28.94
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	9.63
Other Inorganic Materials	46.64
Cellulosics	37.43
Rubber	3.81
Plastics	110.17
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	3.76
Packaging Material, Rubber	0.22
Packaging Material, Steel	151.82
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.76E-02
Am-243	4.17E-10
Cs-137	1.40E-05
Np-237	1.67E-05
Pu-238	1.80E-02
Pu-239	3.56E-01
Pu-240	5.17E-02
Pu-241	6.06E-01
Pu-242	2.86E-06
Sr-90	1.39E-05
Th-229	7.82E-14
Th-230	2.68E-11
Th-232	9.44E-19
U-233	3.56E-10
U-234	7.11E-07
U-235	9.59E-09
U-236	7.66E-09
U-238	2.22E-15

Haz. Waste No(s).

D008, F001

TRUCON Code(s)

125/225, 154

Waste Stream Description

Miscellaneous Containers waiting assignment to waste streams

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-00-03**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	NON-PN EQUIPMENT					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Canister - (LANL-RH)	2.1	0.0	2.1
Current Form Total	2.1	0.0	2.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid - Dir Ld	1.8	0.0	1.8
Final Form Total	1.8	0.0	1.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.37
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.33
Cellulosics	0.00
Rubber	0.00
Plastics	19.45
Cement	0.00
Solidified Inorganic Material	3650.35
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.00
Packaging Material, Steel	560.67
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Pu-239	7.06E+00
U-235	2.16E-07

Haz. Waste No(s).

D008

No TRUCON Codes Provided

Waste Stream Description

LAMPRE REACTOR VESSEL SEALED IN CASK VESSEL

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-03-01**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Source Information Not Compiled	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2011
Stream Name	Solidified Organics					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	33.80
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	12.42
Cellulosics	0.00
Rubber	0.00
Plastics	52.96
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	269.37
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.77E-01
Np-237	3.24E-05
Pu-238	2.57E-02
Pu-239	9.04E-01
Pu-240	2.11E-01
Pu-241	2.63E+00
Pu-242	1.22E-05
Th-229	9.61E-14
Th-230	5.45E-12
Th-232	2.47E-18
U-233	5.47E-10
U-234	2.95E-07
U-235	3.56E-09
U-236	2.50E-08
U-238	7.55E-15

Haz. Waste No(s).

D006, D008, D009, D011, D019, D021, F001, F002, F005

TRUCON Code(s)

112/212

Waste Stream Description

Solidified Organics

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-03-09**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Heterogeneous Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Current Form Total	0.6	0.0	0.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	28.13
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	9.20
Other Inorganic Materials	44.61
Cellulosics	35.94
Rubber	3.64
Plastics	105.51
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.71
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.01E-01
Am-243	1.23E-03
Cs-137	1.65E-06
Np-237	2.72E-04
Pu-238	2.47E+00
Pu-239	4.94E+00
Pu-240	1.16E+00
Pu-241	1.76E+01
Pu-242	6.75E-05
U-234	2.73E-04
U-235	1.84E-07

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, 154

Waste Stream Description

Mixed heterogeneous combustible and non-combustible debris.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-03-10**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Source Information Not Compiled	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Combined Combustible and NonCombustible					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
Other	64.0	0.0	64.0
Current Form Total	64.4	0.0	64.4

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	64.3	0.0	64.3
Final Form Total	64.7	0.0	64.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.25
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.08
Other Inorganic Materials	0.40
Cellulosics	0.32
Rubber	0.03
Plastics	0.94
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.01
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.43
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.29
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	6.90E-03
Am-243	2.56E-08
Np-237	1.12E-07
Pu-238	4.72E-04
Pu-239	1.64E-02
Pu-240	3.83E-03
Pu-241	5.24E-02
Pu-242	2.20E-07
Th-229	8.35E-17
Th-230	1.88E-12
Th-232	5.21E-20
U-233	9.55E-13
U-234	1.04E-07
U-235	9.41E-08
U-236	6.41E-10
U-238	1.26E-09

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225, 154

Waste Stream Description

Combined Combustible and NonCombustible

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-03-12**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Combustible debris waste from chemistry operations in wings 3, 5, and 7 of the CMR facility					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	15.62
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	5.11
Other Inorganic Materials	24.78
Cellulosics	19.96
Rubber	2.02
Plastics	58.60
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.39
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.26E-01
Cs-137	6.26E-05
Np-237	1.53E-07
Pu-238	2.61E-02
Pu-239	9.20E-01
Pu-240	2.15E-01
Pu-241	2.67E+00
Pu-242	1.24E-05
Sr-90	6.23E-05
Th-229	1.46E-16
Th-230	7.81E-11
Th-232	2.51E-18
U-233	1.26E-12
U-234	2.27E-06
U-235	3.78E-08
U-236	2.55E-08
U-238	7.69E-15

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225, 154

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.

Waste Stream ID: **LA-TA-03-14**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Metals and Miscellaneous Equipment Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Box - Crate	8.8	0.0	8.8
Current Form Total	8.8	0.0	8.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	9.5	0.0	9.5
Final Form Total	9.5	0.0	9.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	56.34
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	18.43
Other Inorganic Materials	89.36
Cellulosics	71.98
Rubber	7.30
Plastics	211.34
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	1.41
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.20
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.44
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Pu-238	2.94E-01
Pu-239	6.65E-04
Th-230	6.35E-09
U-234	3.56E-05
U-235	2.42E-11

Haz. Waste No(s).

D008

TRUCON Code(s)

125/225, 154

Waste Stream Description

Metals and Miscellaneous Equipment Debris

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-03-27**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Combined combustible and noncombustible debris waste (RH-TRU) of the CMR facility					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Canister - (LANL-RH)	76.2	0.0	76.2
RH Can w/ Fxd Lid - Dir Ld	1.0	0.0	1.0
Current Form Total	77.2	0.0	77.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Fxd Lid - Dir Ld	0.9	0.0	0.9
RH Can w/ Remov Lid - Dir Ld	76.5	0.0	76.5
Final Form Total	77.4	0.0	77.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	233.37
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	76.34
Other Inorganic Materials	370.19
Cellulosics	298.19
Rubber	30.23
Plastics	875.48
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	5.86
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.00
Packaging Material, Steel	559.21
Packaging Material, Lead	5.33

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.96E-02
Cs-137	1.06E+01
Np-237	4.49E-07
Pu-238	1.63E-02
Pu-239	1.05E+00
Pu-240	3.26E-02
Pu-241	3.06E-01
Pu-242	1.96E-05
Sr-90	7.19E+00
Th-229	1.93E-14
Th-230	6.58E-09
Th-232	1.66E-16
U-233	2.49E-11
U-234	2.63E-05
U-235	1.08E-04
U-236	1.34E-07
U-238	5.32E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s)

117/217, 125/225, 154

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.

Waste Stream ID: **LA-TA-03-28**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Cement paste from CMR building (mixed)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.0	0.0	1.0
Current Form Total	1.0	0.0	1.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.0	0.0	1.0
Final Form Total	1.0	0.0	1.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.09
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	3.05
Cement	1015.09
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Pu-238	2.56E+00
Th-230	5.86E-08
U-234	3.20E-04

Haz. Waste No(s).

D007, F001, F002

TRUCON Code(s)

114/214, 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-03-30**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2011
Stream Name	Absorbed Organics on vermiculite (mixed)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
30-gal Drum	0.1	0.0	0.1
Current Form Total	0.1	0.0	0.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	49.48
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	18.18
Cellulosics	0.00
Rubber	0.00
Plastics	77.53
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	394.36
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Pu-238	2.48E-01
Th-230	5.37E-09
U-234	3.01E-05

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Absorbed Organics on Vermiculite Organic liquids (solvents and oils) generated from facility and equipment operations and maintenance and absorbed on vermiculite.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-03-34**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Heterogeneous Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Box - FRP	19.5	0.0	19.5
Other	18.4	0.0	18.4
Current Form Total	37.9	0.0	37.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	37.8	0.0	37.8
Final Form Total	37.8	0.0	37.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	7.02
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	2.30
Other Inorganic Materials	11.13
Cellulosics	8.96
Rubber	0.91
Plastics	26.32
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.18
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.20
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.44
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.70E-05
Cs-137	8.28E-09
Pu-238	4.58E-02
Pu-239	9.89E-05
Pu-240	2.32E-05
Sr-90	3.68E-09
U-234	2.68E-06
U-235	7.68E-08

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225, 154

Waste Stream Description

Miscellaneous debris waste including fume hoods and stainless steel gloveboxes.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-03-42**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	HEPA filter debris waste from wings 2, 3, 4, 5, and 7 of CMR Building					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	9.5	0.0	9.5
Current Form Total	9.5	0.0	9.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	9.5	0.0	9.5
Final Form Total	9.5	0.0	9.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	15.74
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	5.15
Other Inorganic Materials	24.97
Cellulosics	20.11
Rubber	2.04
Plastics	59.04
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.40
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.20
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.44
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.64E-03
Am-243	9.44E-07
Cs-137	2.93E-06
Np-237	1.36E-07
Pu-238	4.25E-02
Pu-239	2.98E-03
Pu-240	6.96E-04
Pu-241	7.20E-03
Pu-242	4.01E-08
Th-229	1.61E-15
Th-230	3.68E-11
Th-232	3.25E-20
U-233	4.59E-12
U-234	9.89E-07
U-235	4.98E-08
U-236	1.65E-10
U-238	4.98E-17

No Hazardous Waste Numbers Provided

TRUCON Code(s)

119/219, 125/225, 154

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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-21-01**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Heterogeneous Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	3.8	0.0	3.8
Current Form Total	3.8	0.0	3.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	3.8	0.0	3.8
Final Form Total	3.8	0.0	3.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	112.87
Aluminum-based Metal/Alloys	43.04
Other Metal/Alloys	86.52
Other Inorganic Materials	24.59
Cellulosics	73.35
Rubber	56.66
Plastics	42.16
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.20
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.44
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.50E-02
Cs-137	2.02E-03
Np-237	1.25E-06
Pu-238	1.54E-02
Pu-239	6.50E-01
Pu-240	1.16E-01
Pu-241	1.75E+00
Sr-90	2.94E-04
U-234	3.10E-05
U-235	1.41E-06
U-238	6.69E-06

No Hazardous Waste Numbers Provided

TRUCON Code(s)

111/211, 125/225, 154

Waste Stream Description

Mixed heterogeneous combustible and non-combustible debris.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-21-05**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Graphite					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

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
Current Form Total	0.3	0.0	0.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
Final Form Total	0.4	0.0	0.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	49.00
Aluminum-based Metal/Alloys	18.68
Other Metal/Alloys	37.56
Other Inorganic Materials	10.68
Cellulosics	31.84
Rubber	24.59
Plastics	18.30
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.49E-01
Cs-137	8.12E-05
Np-237	5.63E-06
Pu-238	5.91E-02
Pu-239	2.55E+00
Pu-240	6.08E-01
Pu-241	1.59E+00
Pu-242	4.08E-05
Sr-90	7.68E-05
Th-229	4.29E-13
Th-230	3.33E-09
Th-232	6.09E-16
U-233	4.17E-10
U-234	1.32E-05
U-235	4.76E-05
U-236	6.67E-07
U-238	2.34E-13

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225, 154

Waste Stream Description

Graphite

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-21-06**

Appendix A
Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Combustible debris waste (mixed)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
30-gal Drum	14.9	0.0	14.9
55-gal Drum Dir Ld w/ Liner	184.7	0.0	184.7
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.3	0.0	0.3
Cask - Misc w/ 1 - 30-gal Drum	7.9	0.0	7.9
Cask - Misc w/ 2 - 30-gal Drums	73.5	0.0	73.5
Current Form Total	281.3	0.0	281.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	326.4	0.0	326.4
Final Form Total	326.4	0.0	326.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	26.35
Aluminum-based Metal/Alloys	10.05
Other Metal/Alloys	20.20
Other Inorganic Materials	5.74
Cellulosics	17.12
Rubber	13.23
Plastics	9.84
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.36E-01
Cs-137	2.20E-05
Np-237	2.27E-06
Pu-238	4.07E+01
Pu-239	6.29E-01
Pu-240	1.91E-01
Pu-241	7.72E-01
Pu-242	3.57E-05
Sr-90	2.09E-05
Th-229	1.54E-13
Th-230	1.08E-06
Th-232	1.71E-16
U-233	1.59E-10
U-234	5.57E-03
U-235	2.88E-06
U-236	1.98E-07
U-238	1.94E-13

Haz. Waste No(s).
F001, F002

TRUCON Code(s)
125/225, 154

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.

Waste Stream ID: **LA-TA-21-07**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Metal					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
30-gal Drum	5.7	0.0	5.7
55-gal Drum Dir Ld w/ Liner	66.6	0.0	66.6
Box - Crate	482.3	0.0	482.3
Cask - Misc w/ 1 - 30-gal Drum	3.1	0.0	3.1
Cask - Misc w/ 2 - 30-gal Drums	43.9	0.0	43.9
Other	7.8	0.0	7.8
Current Form Total	609.4	0.0	609.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	142.1	0.0	142.1
SWB Dir Ld w/ Liner	489.5	0.0	489.5
Final Form Total	631.6	0.0	631.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	38.86
Aluminum-based Metal/Alloys	14.82
Other Metal/Alloys	29.79
Other Inorganic Materials	8.47
Cellulosics	25.25
Rubber	19.51
Plastics	14.52
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	9.27
Packaging Material, Rubber	0.28
Packaging Material, Steel	148.34
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.76E-02
Cs-137	8.12E-06
Np-237	5.57E-07
Pu-238	1.67E+01
Pu-239	2.85E-01
Pu-240	6.00E-02
Pu-241	1.86E-01
Pu-242	5.34E-06
Sr-90	7.70E-06
Th-229	3.79E-14
Th-230	3.35E-07
Th-232	5.38E-17
U-233	3.90E-11
U-234	1.94E-03
U-235	1.88E-08
U-236	6.23E-08
U-238	2.90E-14

Haz. Waste No(s).

D008

TRUCON Code(s)

125/225, 154

Waste Stream Description

Metal

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-21-08**

Appendix A
Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Glass					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
30-gal Drum	0.3	0.0	0.3
55-gal Drum Dir Ld w/ Liner	2.1	0.0	2.1
Cask - Misc w/ 2 - 30-gal Drums	1.1	0.0	1.1
Current Form Total	3.5	0.0	3.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	4.2	0.0	4.2
Final Form Total	4.2	0.0	4.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	32.11
Aluminum-based Metal/Alloys	12.24
Other Metal/Alloys	24.61
Other Inorganic Materials	7.00
Cellulosics	20.86
Rubber	16.12
Plastics	11.99
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.10E-01
Cs-137	2.13E-05
Np-237	2.08E-06
Pu-238	2.16E+01
Pu-239	6.47E-01
Pu-240	1.82E-01
Pu-241	6.62E-01
Pu-242	2.70E-05
Sr-90	2.02E-05
Th-229	1.49E-13
Th-230	4.41E-07
Th-232	1.73E-16
U-233	1.49E-10
U-234	2.54E-03
U-235	4.68E-08
U-236	1.94E-07
U-238	1.51E-13

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225, 154

Waste Stream Description
Glass

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***
NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-21-09**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Hepa Filters					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

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
Cask - Misc w/ 2 - 30-gal Drums	7.4	0.0	7.4
Current Form Total	8.1	0.0	8.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	14.1	0.0	14.1
Final Form Total	14.1	0.0	14.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	29.88
Aluminum-based Metal/Alloys	11.39
Other Metal/Alloys	22.90
Other Inorganic Materials	6.51
Cellulosics	19.42
Rubber	15.00
Plastics	11.16
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.25E-03
Cs-137	8.14E-07
Np-237	5.39E-08
Pu-238	1.04E+02
Pu-239	2.56E-02
Pu-240	5.98E-03
Pu-241	1.51E-02
Pu-242	3.45E-07
Sr-90	7.70E-07
Th-229	4.11E-15
Th-230	2.24E-06
Th-232	5.99E-18
U-233	3.99E-12
U-234	1.26E-02
U-235	1.89E-09
U-236	6.56E-09
U-238	1.98E-15

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225, 154

Waste Stream Description

Hepa Filters

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-21-12**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Non-combustible and combustible debris waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
30-gal Drum	3.6	0.0	3.6
55-gal Drum Dir Ld w/ Liner	113.4	0.0	113.4
Box - Crate	6.3	0.0	6.3
Cask - Misc w/ 1 - 30-gal Drum	32.4	0.0	32.4
Cask - Misc w/ 2 - 30-gal Drums	89.4	0.0	89.4
Current Form Total	245.1	0.0	245.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	335.7	0.0	335.7
SWB Dir Ld w/ Liner	5.7	0.0	5.7
Final Form Total	341.4	0.0	341.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	25.88
Aluminum-based Metal/Alloys	9.87
Other Metal/Alloys	19.84
Other Inorganic Materials	5.64
Cellulosics	16.82
Rubber	12.99
Plastics	9.67
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	36.47
Packaging Material, Rubber	0.56
Packaging Material, Steel	131.15
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.02E-01
Cs-137	3.25E-05
Np-237	3.84E-06
Pu-238	1.15E+02
Pu-239	8.05E-01
Pu-240	2.71E-01
Pu-241	1.24E+00
Pu-242	7.63E-05
Sr-90	3.09E-05
Th-229	3.67E-04
Th-230	4.02E-06
Th-232	2.29E-16
U-233	1.23E-01
U-234	1.89E-02
U-235	5.80E-06
U-236	2.73E-07
U-238	4.03E-13

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225, 154

Waste Stream Description

COMBINED COMBUSTIBLE/NON-COMBUSTIBLE LAB TRASH

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-21-13**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Cemented wastewater treatment sludge (mixed)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	15.0	0.0	15.0
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.3	0.0	0.3
Other	489.1	0.0	489.1
Current Form Total	504.4	0.0	504.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	15.2	0.0	15.2
SWB Dir Ld w/ Liner	489.5	0.0	489.5
Final Form Total	504.7	0.0	504.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	76.12
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	13.54
Cement	2129.71
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	2.28
Packaging Material, Rubber	0.20
Packaging Material, Steel	152.76
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.08E+01
Cs-137	4.07E-04
Np-237	2.70E-05
Pu-238	6.14E-02
Pu-239	1.26E-01
Sr-90	2.85E-04
Th-229	2.69E-14
Th-230	4.75E-10
U-233	2.29E-10
U-234	1.33E-05
U-235	4.28E-05
U-238	2.17E-05

Haz. Waste No(s).

D007, F001, F002

No TRUCON Codes Provided

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-21-15**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2011
Stream Name	Solidified organics					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
30-gal Drum	0.2	0.0	0.2
55-gal Drum Dir Ld w/ Liner	3.3	0.0	3.3
Current Form Total	3.5	0.0	3.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.5	0.0	3.5
Final Form Total	3.5	0.0	3.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	52.10
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	19.15
Cellulosics	0.00
Rubber	0.00
Plastics	81.64
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	415.27
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.37E-01
Cs-137	6.80E-05
Np-237	1.66E-07
Pu-238	2.84E-02
Pu-239	1.35E+00
Pu-240	2.34E-01
Pu-241	2.90E+00
Pu-242	1.34E-05
Sr-90	6.76E-05
Th-229	1.58E-16
Th-230	8.48E-11
Th-232	2.73E-18
U-233	1.37E-12
U-234	2.47E-06
U-235	4.24E-08
U-236	2.77E-08
U-238	8.35E-15

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Solidified organics

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-21-16**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	SOLIDIFIED INORGANIC PROCESS SOLID					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
30-gal Drum	25.9	0.0	25.9
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
Current Form Total	57.7	0.0	57.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	57.4	0.0	57.4
Final Form Total	57.4	0.0	57.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	7.34
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	1.31
Cement	205.35
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.66E+00
Cs-137	7.44E-04
Np-237	2.00E-06
Pu-238	4.35E-01
Pu-239	1.12E+01
Pu-240	2.66E+00
Pu-241	3.58E+01
Pu-242	2.17E-04
Sr-90	7.39E-04
Th-229	1.91E-15
Th-230	1.44E-09
Th-232	3.11E-17
U-233	1.65E-11
U-234	4.16E-05
U-235	5.76E-05
U-236	3.15E-07
U-238	1.35E-13

Haz. Waste No(s).

D008

No TRUCON Codes Provided

Waste Stream Description

LEACHED PROCESS RESIDUES

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-21-17**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Source Information Not Compiled	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Process solids					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

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
Current Form Total	0.5	0.0	0.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	29.57
Aluminum-based Metal/Alloys	11.28
Other Metal/Alloys	22.67
Other Inorganic Materials	6.44
Cellulosics	19.22
Rubber	14.84
Plastics	11.05
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	8.68E-03
Cs-137	1.35E-06
Np-237	8.91E-08
Pu-238	9.28E-04
Pu-239	4.24E-02
Pu-240	9.88E-03
Pu-241	2.50E-02
Pu-242	5.71E-07
Sr-90	1.27E-06
Th-229	6.79E-15
Th-230	5.10E-11
Th-232	9.90E-18
U-233	6.60E-12
U-234	2.03E-07
U-235	3.12E-09
U-236	1.08E-08
U-238	3.28E-15

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225, 154

Waste Stream Description

Special items (precious metals) requiring tracking by CST-7

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-50-18**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Cemented caustic liquid waste (mixed)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
Current Form Total	0.4	0.0	0.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
Final Form Total	0.4	0.0	0.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	1.03
Cement	1026.98
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.23E-01
Np-237	8.93E-06
Pu-239	1.39E-02
Th-229	7.89E-13
U-233	7.24E-10
U-235	5.07E-10

Haz. Waste No(s).

D007, 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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-50-19**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Homogeneous Inorganic Solids					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	62.8	0.0	62.8
Current Form Total	62.8	0.0	62.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	62.8	0.0	62.8
Final Form Total	62.8	0.0	62.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.09
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.08
Cellulosics	0.00
Rubber	0.00
Plastics	4.52
Cement	0.00
Solidified Inorganic Material	848.58
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.78E-01
Np-237	4.90E-07
Pu-238	3.42E-02
Pu-239	1.28E-01
Pu-240	2.40E-02
Pu-241	3.01E-01
Pu-242	1.39E-06
Th-229	4.88E-16
Th-230	1.53E-11
Th-232	2.81E-19
U-233	4.16E-12
U-234	6.12E-07
U-235	4.32E-09
U-236	2.85E-09
U-238	8.64E-16

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)

111/211, 125/225

Waste Stream Description

Homogeneous dewatered sludge generated in the TA-50-01 RLWTF main treatment process.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-55-14**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Cemented TRU Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Current Form Total	0.6	0.0	0.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	42.06
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	7.48
Cement	1176.76
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.22E+01
Pu-238	6.18E-01
Pu-239	2.10E+01
Pu-240	4.91E+00
Pu-241	7.46E+01
Pu-242	2.84E-04
U-234	4.49E-05
U-235	7.80E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s)

114/214, 126/226

Waste Stream Description

Solidified homogenous solid waste(cemented TRU waste) generated TA-55 R&D/fabrication and associated recovery, facility and equipment maintenance, D&D, waste repackaging, and below-grade retrieval operations.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-55-19**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Combustible debris waste (mixed)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	41.8	0.0	41.8
Cask - Misc w/ 1 - 30-gal Drum	0.4	0.0	0.4
Current Form Total	42.2	0.0	42.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	42.6	0.0	42.6
Final Form Total	42.6	0.0	42.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	65.86
Aluminum-based Metal/Alloys	0.27
Other Metal/Alloys	7.89
Other Inorganic Materials	42.71
Cellulosics	5.45
Rubber	8.18
Plastics	25.21
Cement	0.00
Solidified Inorganic Material	1.05
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.39E+00
Cs-137	2.29E-04
Np-237	7.86E-05
Pu-238	2.71E+00
Pu-239	5.87E+00
Pu-240	2.90E+00
Pu-241	2.34E+01
Pu-242	1.64E-03
Sr-90	2.18E-04
Th-229	8.50E-12
Th-230	1.45E-06
Th-232	3.15E-14
U-233	7.27E-09
U-234	5.21E-03
U-235	1.42E-04
U-236	2.19E-05
U-238	3.32E-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, 154

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. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-55-21**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Metal debris waste (mixed)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2.3	0.0	2.3
Current Form Total	2.3	0.0	2.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2.3	0.0	2.3
Final Form Total	2.3	0.0	2.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	121.06
Aluminum-based Metal/Alloys	0.49
Other Metal/Alloys	14.51
Other Inorganic Materials	78.51
Cellulosics	10.02
Rubber	15.03
Plastics	46.35
Cement	0.00
Solidified Inorganic Material	1.93
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.33E-01
Cs-137	1.07E-05
Np-237	1.18E-06
Pu-238	7.65E+00
Pu-239	2.56E-01
Pu-240	9.12E-02
Pu-241	4.95E-01
Pu-242	2.50E-05
Sr-90	1.01E-05
Th-229	6.72E-14
Th-230	5.64E-07
Th-232	6.84E-17
U-233	7.54E-11
U-234	2.29E-03
U-235	1.74E-08
U-236	8.66E-08
U-238	8.92E-07

Haz. Waste No(s).

D008

TRUCON Code(s)

125/225, 154

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. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-55-30**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Non-combustible and combustible debris waste (mixed)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	68.0	0.0	68.0
55-gal POC - 12" w/ Liner	0.2	0.0	0.2
Current Form Total	68.2	0.0	68.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	68.0	0.0	68.0
55-gal POC - 12" w/ Liner	0.2	0.0	0.2
Final Form Total	68.2	0.0	68.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	80.66
Aluminum-based Metal/Alloys	0.33
Other Metal/Alloys	9.67
Other Inorganic Materials	52.31
Cellulosics	6.68
Rubber	10.01
Plastics	30.88
Cement	0.00
Solidified Inorganic Material	1.29
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.41
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	131.98
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.87E+00
Cs-137	9.97E-05
Np-237	3.30E-05
Pu-238	2.20E+00
Pu-239	2.67E+00
Pu-240	1.56E+00
Pu-241	1.54E+01
Pu-242	2.11E-03
Pu-244	3.87E-10
Sr-90	9.51E-05
Th-229	1.76E-12
Th-230	1.84E-07
Th-232	1.66E-15
U-233	2.04E-09
U-234	7.52E-04
U-235	8.64E-06
U-236	1.80E-06
U-238	1.24E-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

TRUCON Code(s)

125/225, 154

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, 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. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-55-32**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Non-combustible and combustible debris waste (mixed)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Current Form Total	1.9	0.0	1.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	29.58
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	1.83
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	15.50
Cement	0.00
Solidified Inorganic Material	93.97
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.20
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.44
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.36E-03
Np-237	2.18E-07
Pu-238	6.21E-02
Pu-239	1.34E-02
Pu-240	3.13E-03
Pu-241	2.80E-02
Pu-242	1.80E-07
Th-229	2.52E-15
Th-230	5.38E-11
Th-232	1.46E-19
U-233	7.25E-12
U-234	1.45E-06
U-235	1.05E-10
U-236	7.41E-10
U-238	2.24E-16

No Hazardous Waste Numbers Provided

TRUCON Code(s)

124/224, 125/225

Waste Stream Description

MIXED COMBUSTIBLE/NONCOMBUSTIBLE WASTE

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-55-38**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Cemented inorganics (mixed)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Cask - Misc w/ 1 - 30-gal Drum	0.4	0.0	0.4
Current Form Total	0.6	0.0	0.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.0	0.0	1.0
Final Form Total	1.0	0.0	1.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.94
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.17
Cement	26.38
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.35E-02
Cs-137	6.36E-06
Np-237	3.02E-08
Pu-238	2.09E+01
Pu-239	1.83E-02
Pu-240	9.10E-03
Pu-241	7.47E-02
Pu-242	9.43E-06
Sr-90	6.32E-06
Th-229	2.99E-17
Th-230	1.26E-07
Th-232	1.06E-19
U-233	2.55E-13
U-234	3.55E-03
U-235	7.66E-10
U-236	1.08E-09
U-238	5.85E-15

Haz. Waste No(s).

D008

TRUCON Code(s)

114/214, 126/226

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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LB-T001**

Appendix A

Waste Profile Report

Site	Lawrence Berkeley Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	LBL-Non Mixed Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
12.2-gal Drum	0.0	0.0	0.1
Current Form Total	0.0	0.0	0.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.2	0.4
Final Form Total	0.2	0.2	0.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.19
Other Inorganic Materials	0.08
Cellulosics	4.95
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.49
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.40E-02
Am-243	4.81E-05
Cs-137	4.57E-04
Np-237	4.11E-02
Pu-239	1.48E+00
Pu-240	4.81E-02
Pu-241	7.79E-01
Th-232	2.69E-03
U-238	1.88E-06

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Heterogeneous transuranic, non mixed waste

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LB-T002**

Appendix A

Waste Profile Report

Site	Lawrence Berkeley Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	LBL - Mixed Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
2.5-gal Drum	0.0	0.0	0.0
Current Form Total	0.0	0.0	0.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.2	0.4
Final Form Total	0.2	0.2	0.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.07
Cellulosics	1.78
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.33E-02
Am-243	5.77E-05
Np-237	2.79E-04
Pu-239	2.64E-01
Pu-241	4.57E-01

Haz. Waste No(s).

D007

TRUCON Code(s)

125/225

Waste Stream Description

Heterogeneous transuranic mixed waste

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LL-M001**

Appendix A

Waste Profile Report

Site	Lawrence Livermore National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	R&D Glovebox Waste (Form 1)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	14.1	0.0	14.1
55-gal Drum Dir Ld w/o Liner	33.5	375.2	408.7
55-gal POC - 12" w/ Liner	2.9	18.7	21.6
Current Form Total	50.5	394.0	444.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	47.6	375.2	422.9
55-gal POC - 12" w/ Liner	2.9	18.7	21.6
Final Form Total	50.5	394.0	444.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	71.63
Aluminum-based Metal/Alloys	8.43
Other Metal/Alloys	17.08
Other Inorganic Materials	11.15
Cellulosics	35.41
Rubber	16.46
Plastics	37.13
Cement	18.27
Solidified Inorganic Material	5.83
Solidified Organic Material	0.17
Soils	0.11
Vitrified	0.00
Packaging Material, Cellulosics	6.57
Packaging Material, Plastic	1.80
Packaging Material, Rubber	0.57
Packaging Material, Steel	150.14
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.28E+00
Am-243	5.41E-04
Cm-244	1.83E+00
Cs-137	1.67E-03
Np-237	3.48E-05
Pu-238	3.62E+00
Pu-239	3.76E+00
Pu-240	1.10E+00
Pu-241	1.22E+01
Pu-242	3.59E-04
Pu-244	6.38E-13
Sr-90	1.66E-03
Th-229	3.56E-06
Th-230	6.36E-07
Th-232	3.29E-08
U-233	9.09E-04
U-234	1.51E-04
U-235	6.33E-06
U-236	6.51E-08
U-238	2.48E-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

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. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LL-T004**

Appendix A

Waste Profile Report

Site	Lawrence Livermore National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Salt Waste			**Inventory Date**	12/31/2011
Stream Name	Pyrochemical salt waste (Form 4)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	1.2	0.0	1.2
Final Form Total	1.2	0.0	1.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	20.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	290.00
Cellulosics	2.00
Rubber	0.00
Plastics	20.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.11E-02
Cm-244	1.46E-03
Np-237	1.62E-07
Pu-238	8.25E-03
Pu-239	3.97E-02
Pu-240	1.92E-02
Pu-241	2.05E-01
Pu-242	6.24E-06
Th-229	1.17E-16
Th-230	4.32E-13
Th-232	5.62E-20
U-233	1.35E-12
U-234	4.69E-08
U-235	7.83E-11
U-236	1.14E-09
U-238	1.94E-15

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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LL-W018-S5100**

Appendix A

Waste Profile Report

Site	Lawrence Livermore National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Combined metal scrap & incidental combust.(Form 3)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Box - Misc	120.6	0.0	120.6
SLB2 (5' x 5' x 8) Dir Ld	0.0	141.5	141.5
SWB Dir Ld w/o Liner	20.8	138.0	158.8
Current Form Total	141.4	279.5	420.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SLB2 (5' x 5' x 8) Dir Ld	96.2	141.5	237.7
SWB Dir Ld w/o Liner	20.8	138.0	158.8
Final Form Total	117.0	279.5	396.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	65.70
Aluminum-based Metal/Alloys	4.00
Other Metal/Alloys	15.80
Other Inorganic Materials	0.67
Cellulosics	17.57
Rubber	3.32
Plastics	2.54
Cement	1.58
Solidified Inorganic Material	0.00
Solidified Organic Material	3.16
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.16
Packaging Material, Steel	190.68
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	8.83E-02
Cm-244	5.43E-05
Np-237	1.16E-07
Pu-238	7.12E-03
Pu-239	6.12E-02
Pu-240	1.83E-02
Pu-241	4.46E-01
Pu-242	3.95E-06
Th-229	1.22E-16
Th-230	1.51E-12
Th-232	2.14E-19
U-233	1.01E-12
U-234	8.16E-08
U-235	2.41E-10
U-236	2.17E-09
U-238	2.45E-15

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 steram 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. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LL-W018-SS**

Appendix A

Waste Profile Report

Site	Lawrence Livermore National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Sealed Sources					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	4.2	0.0	4.2
55-gal POC - 12" w/ Liner	0.0	4.2	4.2
Current Form Total	4.2	4.2	8.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal POC - 12" w/ Liner	4.2	4.2	8.3
Final Form Total	4.2	4.2	8.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	7.11
Aluminum-based Metal/Alloys	1.52
Other Metal/Alloys	4.31
Other Inorganic Materials	3.78
Cellulosics	1.54
Rubber	0.00
Plastics	0.03
Cement	0.00
Solidified Inorganic Material	9.30
Solidified Organic Material	4.92
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	135.10
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	528.85
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.89E+01
Am-243	2.50E-06
Cm-244	1.87E-04
Cs-137	3.51E-03
Np-237	2.63E-05
Pu-238	3.06E+00
Pu-239	1.44E-01
Pu-240	4.61E-04
Pu-241	8.61E-02
Pu-244	2.85E-23
Sr-90	1.09E-02
Th-229	2.95E-14
Th-230	6.48E-10
Th-232	5.39E-21
U-233	2.37E-10
U-234	3.50E-05
U-235	1.03E-07
U-236	5.46E-11

No Hazardous Waste Numbers Provided

TRUCON Code(s)

117/217

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 Dry

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LL-W019**

Appendix A

Waste Profile Report

Site	Lawrence Livermore National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2011
Stream Name	Solidified Waste (Form 2)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	15.4	0.0	15.4
55-gal Drum Dir Ld w/o Liner	5.6	19.8	25.4
Current Form Total	21.0	19.8	40.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	21.0	19.8	40.8
Final Form Total	21.0	19.8	40.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	23.19
Aluminum-based Metal/Alloys	45.07
Other Metal/Alloys	2.12
Other Inorganic Materials	4.51
Cellulosics	4.04
Rubber	5.86
Plastics	33.67
Cement	0.00
Solidified Inorganic Material	103.30
Solidified Organic Material	39.41
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.77E+00
Am-243	1.02E-07
Cm-244	8.17E-04
Cs-137	1.79E-06
Np-237	8.36E-05
Pu-238	1.23E+00
Pu-239	4.77E+00
Pu-240	1.29E+00
Pu-241	1.51E+01
Pu-242	2.19E-04
Sr-90	3.79E-07
Th-229	9.52E-06
Th-230	3.66E-10
Th-232	3.76E-18
U-233	5.41E-02
U-234	2.34E-05
U-235	2.05E-05
U-236	7.62E-08
U-238	1.06E-04

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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **ND-T001**

Appendix A

Waste Profile Report

Site	Nuclear Radiation Development Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	AmO2 Bagout/ Silver Bagout					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.4	4.2	4.6
Current Form Total	0.4	4.2	4.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.4	4.2	4.6
Final Form Total	0.4	4.2	4.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	211.54
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	10.63
Other Inorganic Materials	5.41
Cellulosics	211.54
Rubber	31.73
Plastics	52.88
Cement	0.00
Solidified Inorganic Material	531.73
Solidified Organic Material	10.63
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.14E+01

Haz. Waste No(s).

D008, D011, D035, D040, F001, F002, F005

TRUCON Code(s)

125/225

Waste Stream Description

AmO2 Bagout- Material generated from the production of ionization sources containing Am-241. Material consists mainly of consumable items used in the production gloveboxes(e.g tissues paper towels, graphite blocks) but also includes equipment and tools that have exceeded their useful life. Most material is contained in one gallon cans that are placed into fifty five gallon drums. Silver Bagout- Material is mainly a vitrified slag that is created during the recovery of precious metals from scrap Am-241 foil. Also contained are items used in the glovebox during the recovery process (e.g. plastic bags, Carbon/Graphite crucibles, paper towels, induction furnaces).

Waste Stream ID: **ND-T002**

Appendix A

Waste Profile Report

Site	Nuclear Radiation Development Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Returned Smoke Detector Sources					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	1.5	0.8	2.3
Current Form Total	1.5	0.8	2.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	1.5	0.8	2.3
Final Form Total	1.5	0.8	2.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	36.33
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	3.63
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.24E+00
Np-237	1.46E-06
Th-229	3.72E-16
U-233	6.34E-12

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Sealed sources retrurned from smoke detector manufacturers or other end users.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **NT-JAS-01**

Appendix A

Waste Profile Report

Site	Nevada National Security Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Combined metal scrap and incidental combustibles					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/o Liner	34.0	51.0	85.1
Current Form Total	34.0	51.0	85.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/o Liner	34.0	51.0	85.1
Final Form Total	34.0	51.0	85.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	720.74
Aluminum-based Metal/Alloys	3.68
Other Metal/Alloys	0.00
Other Inorganic Materials	3.68
Cellulosics	0.00
Rubber	3.68
Plastics	3.68
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.44
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	8.47E-02
Np-237	9.61E-07
Pu-238	4.77E-02
Pu-239	1.48E+00
Pu-240	3.38E-01
Pu-241	2.18E+00
Pu-242	1.85E-05
Th-229	1.01E-14
Th-230	4.13E-11
Th-232	1.58E-17
U-233	2.97E-11
U-234	1.11E-06
U-235	1.17E-08
U-236	8.01E-08
U-238	2.30E-14

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **NT-W021**

Appendix A

Waste Profile Report

Site	Nevada National Security Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	V3XA Spheres					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Box - Crate	5.1	0.0	5.1
Current Form Total	5.1	0.0	5.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	5.4	0.0	5.4
Final Form Total	5.4	0.0	5.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	464.11
Aluminum-based Metal/Alloys	0.98
Other Metal/Alloys	1.56
Other Inorganic Materials	0.00
Cellulosics	1.50
Rubber	0.00
Plastics	0.00
Cement	2.22
Solidified Inorganic Material	81.08
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.38E+00
Np-237	1.75E-06
Pu-238	2.44E-01
Pu-239	9.43E+00
Pu-240	2.17E+00
Pu-241	1.04E+01
Pu-242	1.92E-04
Th-229	1.38E-13
Th-230	4.76E-08
Th-232	2.53E-17
U-233	4.03E-10
U-234	1.30E-03
U-235	8.91E-06
U-236	2.56E-07
U-238	4.59E-04

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

The two steel vessels are 1-inch thick by 3-feet diameter, weighing about 3300 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-CHEM-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Analytical Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	ORNL Analytical Chemistry CH-TRU Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

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	16.0	0.0	16.0
79-gal Drum Dir Ld	1.2	0.0	1.2
Box - Misc	2.9	0.0	2.9
Current Form Total	20.5	0.0	20.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	20.4	0.0	20.4
Final Form Total	20.4	0.0	20.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	19.49
Aluminum-based Metal/Alloys	2.33
Other Metal/Alloys	3.15
Other Inorganic Materials	4.55
Cellulosics	35.83
Rubber	22.88
Plastics	28.24
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.23
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.35E-01
Am-243	2.63E-03
Cm-244	1.29E+00
Cs-137	2.81E-01
Np-237	5.96E-07
Pu-238	1.25E+01
Pu-239	3.07E-01
Pu-240	3.91E-02
Pu-241	2.88E-01
Pu-242	6.37E-05
Sr-90	1.67E-01
Th-232	1.67E-07
U-233	5.41E-02
U-234	1.21E-04
U-235	4.14E-06
U-236	1.20E-09
U-238	1.11E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D019, D022, F002, F005

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from analytical chemistry operations at ORNL

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-GENR-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	ORNL General Research & Development CH-TRU Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
110-gal Drum Dir Ld	1.2	0.0	1.2
55-gal Drum Dir Ld w/o Liner	26.4	0.0	26.4
79-gal Drum Dir Ld	0.6	0.0	0.6
Current Form Total	28.3	0.0	28.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	28.1	0.0	28.1
Final Form Total	28.1	0.0	28.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	20.74
Aluminum-based Metal/Alloys	5.15
Other Metal/Alloys	5.15
Other Inorganic Materials	20.74
Cellulosics	38.22
Rubber	25.14
Plastics	10.43
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.13
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.03E-02
Am-243	3.21E-02
Cm-244	1.53E+00
Cs-137	8.43E-04
Np-237	1.32E-03
Pu-238	2.23E-01
Pu-239	2.82E-01
Pu-240	1.04E-02
Pu-241	9.60E-05
Pu-242	1.18E-02
Sr-90	7.17E-04
Th-229	1.88E-07
Th-230	1.98E-05
Th-232	1.29E-07
U-234	4.48E-05
U-235	3.24E-07
U-236	2.99E-11
U-238	5.30E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D028, F002, F005

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from general R&D at ORNL

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-GENR-RH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	ORNL General Research & Development RH-TRU Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	2.9	0.0	2.9
79-gal Drum Dir Ld	0.3	0.0	0.3
Current Form Total	3.2	0.0	3.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	3.1	0.0	3.1
Final Form Total	3.1	0.0	3.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	27.16
Aluminum-based Metal/Alloys	6.75
Other Metal/Alloys	6.75
Other Inorganic Materials	27.16
Cellulosics	50.04
Rubber	32.92
Plastics	13.66
Cement	0.00
Solidified Inorganic Material	0.16
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.57E-03
Am-243	5.51E-02
Cm-244	1.07E-01
Np-237	2.22E-03
Pu-239	3.35E-01
Pu-240	8.45E-04
Pu-241	2.71E-05
Pu-242	1.70E-02
Pu-244	9.32E-12
Th-229	7.32E-04
Th-230	5.79E-13
Th-232	2.72E-19
U-233	3.20E-01
U-234	4.77E-09
U-235	8.59E-09
U-236	4.88E-10
U-238	6.43E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D028, F002, F005

TRUCON Code(s)

325

Waste Stream Description

Waste consists of RH-TRU debris from general R&D at ORNL

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-ISTP-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	ORNL Isotopes Facilities CH-TRU Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
110-gal Drum Dir Ld	5.0	0.0	5.0
55-gal Drum Dir Ld w/o Liner	110.0	0.0	110.0
79-gal Drum Dir Ld	18.5	0.0	18.5
85-gal Drum Dir Ld w/o Liner	1.0	0.0	1.0
Box - Misc	8.2	0.0	8.2
Current Form Total	142.7	0.0	142.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	141.4	0.0	141.4
55-gal POC - 6" w/ Liner	5.4	0.0	5.4
Final Form Total	146.8	0.0	146.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	55.71
Aluminum-based Metal/Alloys	2.92
Other Metal/Alloys	15.99
Other Inorganic Materials	3.44
Cellulosics	27.85
Rubber	15.30
Plastics	50.38
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.34
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	7.91
Packaging Material, Plastic	1.37
Packaging Material, Rubber	0.57
Packaging Material, Steel	137.76
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.18E+00
Am-243	9.23E-03
Cm-244	1.72E+01
Cs-137	2.14E-05
Np-237	3.19E-03
Pu-238	2.07E+01
Pu-239	5.69E-01
Pu-240	3.22E+00
Pu-241	4.69E+02
Pu-242	2.06E-03
Pu-244	6.38E-05
Sr-90	2.61E-06
Th-229	1.48E-07
Th-230	3.51E-04
Th-232	8.49E-06
U-233	1.24E-02
U-234	6.35E-04
U-235	6.50E-06
U-236	8.72E-06
U-238	1.26E-05

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D019, D022, F002, F005

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from isotopes production at ORNL

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-ISTP-RH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	ORNL Isotopes Facilities RH-TRU Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	10.8	0.0	10.8
79-gal Drum w/ 1 - 55-gal Drum	2.1	0.0	2.1
Cask - Misc	8.3	0.0	8.3
Current Form Total	21.2	0.0	21.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	20.6	0.0	20.6
Final Form Total	20.6	0.0	20.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	199.59
Aluminum-based Metal/Alloys	10.47
Other Metal/Alloys	57.29
Other Inorganic Materials	12.32
Cellulosics	99.80
Rubber	54.83
Plastics	180.50
Cement	0.00
Solidified Inorganic Material	1.23
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.31E+00
Am-243	9.74E-04
Cm-244	1.16E+01
Np-237	8.13E-04
Pu-238	1.54E+01
Pu-239	4.45E-01
Pu-240	7.48E-01
Pu-241	3.33E+00
Pu-242	7.84E-04
Pu-244	2.58E-10
Th-229	1.47E-05
Th-230	1.55E-07
Th-232	5.09E-05
U-233	6.42E-03
U-234	1.25E-03
U-235	2.70E-06
U-236	5.59E-07
U-238	8.31E-07

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D019, D022, F002, F005

TRUCON Code(s)

325

Waste Stream Description

Waste consists of RH-TRU debris from isotopes production at ORNL

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-NBL-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	New Brunswick Laboratory CH-TRU Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
110-gal Drum Dir Ld	0.8	0.0	0.8
55-gal Drum Dir Ld w/o Liner	12.5	0.0	12.5
79-gal Drum Dir Ld	8.4	0.0	8.4
85-gal Drum Dir Ld w/o Liner	0.3	0.0	0.3
Current Form Total	22.0	0.0	22.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	21.6	0.0	21.6
Final Form Total	21.6	0.0	21.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	26.73
Aluminum-based Metal/Alloys	1.75
Other Metal/Alloys	34.59
Other Inorganic Materials	71.62
Cellulosics	10.48
Rubber	18.69
Plastics	10.48
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.35
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.14E-02
Am-243	1.93E-04
Cm-244	1.54E+00
Cs-137	1.83E-02
Np-237	7.73E-08
Pu-238	8.03E-02
Pu-239	9.74E-02
Pu-240	4.29E-02
Pu-241	4.92E-03
Pu-242	7.64E-08
Sr-90	8.80E-03
Th-229	5.13E-07
Th-232	3.47E-07
U-233	1.52E-03
U-234	1.12E-04
U-235	1.50E-05
U-238	9.26E-05

Haz. Waste No(s).

D004, D005, D007, D008, D009, D011, D022, F002, F005

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from NBL

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-NFS-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Nuclear Fuel Services CH-TRU Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	90.1	0.0	90.1
Box - Misc	5.1	0.0	5.1
Current Form Total	95.2	0.0	95.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	95.1	0.0	95.1
Final Form Total	95.1	0.0	95.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	67.42
Aluminum-based Metal/Alloys	5.95
Other Metal/Alloys	5.45
Other Inorganic Materials	361.40
Cellulosics	13.88
Rubber	2.97
Plastics	38.17
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.50
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	8.39E-01
Am-243	5.98E-08
Cm-244	3.45E-01
Cs-137	2.07E-07
Np-237	6.07E-07
Pu-238	3.00E-01
Pu-239	2.06E+00
Pu-240	1.12E+00
Pu-241	1.92E+01
Pu-242	1.19E-04
Pu-244	1.49E-11
Sr-90	2.07E-07
Th-229	2.48E-07
Th-232	2.61E-07
U-233	1.10E-04
U-234	6.32E-02
U-235	3.84E-06
U-236	8.37E-09
U-238	6.71E-05

Haz. Waste No(s).

D006, D008, D009, D011, F002

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from NFS

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-NFS-CH-HOM**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Nuclear Fuel Services CH-TRU Homogeneous Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	11.4	0.0	11.4
Current Form Total	11.4	0.0	11.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	11.4	0.0	11.4
Final Form Total	11.4	0.0	11.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	6.78
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	79.89
Cellulosics	0.00
Rubber	0.00
Plastics	13.56
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	10.89
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	6.15E+00
Cs-137	4.71E-06
Np-237	1.48E-04
Pu-238	1.59E+00
Pu-239	1.14E+01
Pu-240	4.54E+00
Pu-241	8.19E+01
Pu-242	7.39E-04
Sr-90	4.71E-06
Th-229	1.42E-06
Th-232	7.62E-07
U-233	1.11E-03
U-234	8.00E-02
U-235	1.00E-05
U-238	2.19E-04

Haz. Waste No(s).

D006, D009

TRUCON Code(s)

111/211

Waste Stream Description

Waste consists of homogeneous waste from NFS

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-NFS-CH-SOIL**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Nuclear Fuel Services CH-TRU Soil Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	12.5	0.0	12.5
Current Form Total	12.5	0.0	12.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	12.5	0.0	12.5
Final Form Total	12.5	0.0	12.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	2.56
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	17.04
Soils	832.40
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.44E-01
Cs-137	5.04E-07
Np-237	1.46E-07
Pu-238	8.30E-02
Pu-239	9.45E-01
Pu-240	3.97E-01
Pu-241	4.67E+00
Pu-242	3.30E-05
Sr-90	4.65E-07
Th-230	1.83E-06
Th-232	6.26E-07
U-233	1.35E-03
U-234	1.64E-02
U-235	1.67E-06
U-238	2.15E-05

Haz. Waste No(s).

F002

TRUCON Code(s)

111/211

Waste Stream Description

Waste consists of soils from NFS

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-PGDP-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Paducah Gaseous Diffusion Plant CH-TRU Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	7.7	0.0	7.7
Current Form Total	7.7	0.0	7.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	7.7	0.0	7.7
Final Form Total	7.7	0.0	7.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	51.17
Aluminum-based Metal/Alloys	9.30
Other Metal/Alloys	23.26
Other Inorganic Materials	4.65
Cellulosics	39.54
Rubber	32.56
Plastics	60.47
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	11.63
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Np-237	2.24E-02
Pu-239	7.24E-02
Th-229	2.89E-09
Th-230	6.42E-07
U-233	2.53E-06
U-234	2.68E-03
U-235	1.08E-04
U-238	2.67E-03

Haz. Waste No(s).

D008

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from PGDP

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-RADP-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	ORNL Radiochemical Processing Research & Development CH-TRU Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

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	26.6	0.0	26.6
79-gal Drum Dir Ld	3.6	0.0	3.6
85-gal Drum Dir Ld w/o Liner	0.6	0.0	0.6
Box - Misc	2.6	0.0	2.6
Current Form Total	33.8	0.0	33.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	33.7	0.0	33.7
Final Form Total	33.7	0.0	33.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	55.72
Aluminum-based Metal/Alloys	2.08
Other Metal/Alloys	7.73
Other Inorganic Materials	6.39
Cellulosics	32.09
Rubber	7.87
Plastics	35.51
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	1.19
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.71E-01
Am-243	4.14E-03
Cm-244	2.97E+00
Cs-137	6.75E-06
Np-237	3.83E-05
Pu-238	4.06E-01
Pu-239	8.42E-01
Pu-240	6.53E-02
Pu-241	1.78E+00
Pu-242	5.70E-05
Pu-244	5.25E-10
Sr-90	5.64E-06
Th-229	4.01E-09
Th-232	3.26E-15
U-233	8.00E-04
U-234	6.26E-05
U-235	5.97E-06
U-238	1.82E-07

Haz. Waste No(s).

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

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from radiochemical processing R&D at ORNL

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-RADP-CH-SOILS**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2011
Stream Name	ORNL Radiochemical Processing Research & Development CH-TRU Soil Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	1.2	0.0	1.2
Current Form Total	1.2	0.0	1.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	1.2	0.0	1.2
Final Form Total	1.2	0.0	1.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	4.78
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	9.57
Soils	464.11
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Cm-244	1.78E-05
Pu-238	3.91E-05
Pu-239	5.28E-02
Pu-240	1.56E-02
Sr-90	2.53E-05
Th-230	3.94E-13
Th-232	7.70E-18
U-234	3.19E-09
U-235	1.35E-09
U-236	1.20E-08
U-238	2.69E-09

Haz. Waste No(s).

F002

TRUCON Code(s)

111/211

Waste Stream Description

Waste consists of CH-TRU soils from radiochemical processing R&D at ORNL

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-RADP-RH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	ORNL Radiochemical Processing Research & Development RH-TRU Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	1.2	0.0	1.2
Current Form Total	1.2	0.0	1.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	1.2	0.0	1.2
Final Form Total	1.2	0.0	1.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	70.09
Aluminum-based Metal/Alloys	2.62
Other Metal/Alloys	9.72
Other Inorganic Materials	8.04
Cellulosics	40.37
Rubber	9.91
Plastics	44.67
Cement	0.00
Solidified Inorganic Material	1.50
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.48E-03
Am-243	5.41E-01
Cm-244	2.42E+00
Np-237	1.13E-04
Pu-239	4.16E-01
Pu-240	1.68E-02
Pu-244	6.28E-15
Th-229	1.73E-08
Th-232	5.03E-18
U-233	7.57E-06
U-235	1.39E-05
U-236	9.27E-09

Haz. Waste No(s).

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

TRUCON Code(s)

325

Waste Stream Description

Waste consists of RH-TRU debris from radiochemical processing R&D at ORNL

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-REDC-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Radiochemical Engineering Development Center CH-TRU Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

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	297.0	25.0	322.0
79-gal Drum Dir Ld	1.5	0.0	1.5
85-gal Drum Dir Ld w/ Liner	0.3	0.0	0.3
Box - Misc	19.9	0.0	19.9
Current Form Total	319.2	25.0	344.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	324.7	25.0	349.6
Final Form Total	324.7	25.0	349.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	50.08
Aluminum-based Metal/Alloys	2.43
Other Metal/Alloys	1.52
Other Inorganic Materials	19.43
Cellulosics	7.28
Rubber	1.97
Plastics	69.05
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.93E-02
Am-243	2.88E-03
Cm-244	4.09E+00
Cs-137	7.27E-03
Np-237	1.55E-04
Pu-238	5.56E-01
Pu-239	9.05E-02
Pu-240	1.32E-01
Pu-241	1.31E+01
Pu-242	2.31E-05
Pu-244	3.33E-09
Sr-90	3.79E-02
Th-229	1.06E-09
Th-232	3.12E-09
U-233	2.51E-03
U-234	2.12E-04
U-235	3.57E-07
U-236	3.89E-04
U-238	2.96E-06

Haz. Waste No(s).

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

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from REDC at ORNL

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-REDC-RH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Radiochemical Engineering Development Center RH-TRU Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	6.0	0.0	6.0
Cask - Misc	300.7	146.1	446.8
Current Form Total	306.8	146.1	452.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 30-gal w/ Liner	51.2	67.1	118.3
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	245.2	68.6	313.9
Final Form Total	296.4	135.8	432.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	218.91
Aluminum-based Metal/Alloys	0.04
Other Metal/Alloys	21.88
Other Inorganic Materials	62.12
Cellulosics	24.73
Rubber	6.15
Plastics	31.91
Cement	0.00
Solidified Inorganic Material	4.48
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	56.18
Packaging Material, Rubber	0.70
Packaging Material, Steel	1118.73
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	8.91E-03
Am-243	5.18E-04
Cm-244	4.44E-01
Cs-137	1.63E-02
Np-237	2.11E-06
Pu-238	4.37E-03
Pu-239	1.85E-03
Pu-240	5.71E-03
Pu-241	1.82E-02
Pu-242	4.33E-05
Pu-244	3.42E-12
Sr-90	1.05E-01
Th-229	7.25E-09
Th-230	9.03E-11
Th-232	4.53E-18
U-233	3.17E-06
U-234	5.49E-07
U-235	6.42E-10
U-236	5.53E-09
U-238	1.57E-07

Haz. Waste No(s).

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

TRUCON Code(s)

325

Waste Stream Description

Waste consists of RH-TRU debris from REDC at ORNL

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-RF-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	ORNL Reactor Fuels Research & Development CH-TRU Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	38.5	0.0	38.5
79-gal Drum Dir Ld	1.5	0.0	1.5
85-gal Drum Dir Ld w/ Liner	0.3	0.0	0.3
Box - Misc	30.6	0.0	30.6
Current Form Total	70.9	0.0	70.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	69.7	0.0	69.7
Final Form Total	69.7	0.0	69.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	91.74
Aluminum-based Metal/Alloys	16.68
Other Metal/Alloys	41.70
Other Inorganic Materials	8.34
Cellulosics	70.89
Rubber	58.38
Plastics	108.43
Cement	0.00
Solidified Inorganic Material	20.85
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.74E-01
Am-243	1.52E-03
Cm-244	5.05E+00
Cs-137	1.08E-02
Np-237	5.27E-06
Pu-238	2.69E+00
Pu-239	1.84E+00
Pu-240	7.20E-01
Pu-241	4.22E+01
Pu-242	2.37E-02
Sr-90	5.65E-03
Th-229	8.61E-04
Th-230	6.29E-07
Th-232	5.25E-06
U-233	7.53E-02
U-234	5.50E-05
U-235	2.54E-06
U-236	2.66E-08
U-238	7.79E-06

Haz. Waste No(s).

D006, D007, D008, D009, D011, D019, F001, F002, F005

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from reactor fuels R&D at ORNL

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-RF-CH-HOM**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	ORNL Reactor Fuels Research & Development CH-TRU Homogeneous Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	2.5	0.0	2.5
Current Form Total	2.5	0.0	2.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	2.5	0.0	2.5
Final Form Total	2.5	0.0	2.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	31.49
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	377.93
Cellulosics	0.00
Rubber	0.00
Plastics	62.99
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	52.49
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.91E-02
Cs-137	1.02E-03
Np-237	1.65E-07
Pu-238	6.69E-03
Pu-239	1.70E-02
Pu-240	1.67E-02
Sr-90	1.02E-02
Th-229	7.15E-15
Th-230	4.84E-09
Th-232	8.26E-18
U-233	9.35E-12
U-234	2.05E-05
U-235	9.18E-07
U-236	1.29E-08
U-238	3.31E-05

Haz. Waste No(s).

D006, D007, D008, D009, D010

TRUCON Code(s)

111/211

Waste Stream Description

Waste consists of homogeneous waste from reactor fuels R&D at ORNL

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-RF-RH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	ORNL Reactor Fuels Research & Development RH-TRU Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	13.9	0.0	13.9
79-gal Drum Dir Ld	1.8	0.0	1.8
Cask - Misc	46.5	10.0	56.4
Current Form Total	62.2	10.0	72.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	59.9	10.0	69.9
Final Form Total	59.9	10.0	69.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	240.22
Aluminum-based Metal/Alloys	54.60
Other Metal/Alloys	49.14
Other Inorganic Materials	54.60
Cellulosics	76.43
Rubber	16.38
Plastics	43.68
Cement	0.00
Solidified Inorganic Material	10.92
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.16E-02
Am-243	8.84E-05
Cm-244	1.39E-02
Cs-137	2.43E+00
Np-237	5.45E-06
Pu-238	1.26E-02
Pu-239	1.10E-01
Pu-240	4.99E-02
Pu-241	3.63E-02
Pu-242	1.93E-06
Pu-244	3.82E-16
Sr-90	3.30E-01
Th-229	7.42E-04
Th-230	1.89E-08
Th-232	4.59E-06
U-233	3.25E-01
U-234	7.95E-05
U-235	4.93E-06
U-236	3.49E-06
U-238	7.90E-06

Haz. Waste No(s).

D008, D009, D011

TRUCON Code(s)

325

Waste Stream Description

Waste consists of RH-TRU debris from reactor fuels R&D at ORNL

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-SWSA-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	ORNL Solid Waste Storage Area 5 North 7802N Trench Area Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	11.9	0.0	11.9
Box - Misc	2.6	0.0	2.6
Current Form Total	14.4	0.0	14.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	14.4	0.0	14.4
Final Form Total	14.4	0.0	14.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	11.86
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	293.90
Cellulosics	1.56
Rubber	0.00
Plastics	1.56
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	3.12
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.39E-04
Am-243	4.35E-07
Cm-244	4.28E+00
Cs-137	1.54E-06
Np-237	5.39E-06
Pu-238	4.99E-04
Pu-239	5.57E-04
Pu-240	3.47E-05
Pu-241	2.04E-04
Pu-242	3.22E-09
Sr-90	1.54E-06
Th-229	7.73E-08
Th-232	9.92E-06
U-233	1.27E-02
U-234	8.85E-08

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D028, F001, F002, F005

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from SWSA 5 7802N Trench area

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-SWSA-CH-SOIL**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2011
Stream Name	ORNL Solid Waste Storage Area 5 North 7802N Trench Area Soil Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	23.3	0.0	23.3
Current Form Total	23.3	0.0	23.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	23.3	0.0	23.3
Final Form Total	23.3	0.0	23.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	2.13
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	1.07
Other Inorganic Materials	4.80
Cellulosics	2.13
Rubber	0.00
Plastics	11.74
Cement	0.00
Solidified Inorganic Material	86.47
Solidified Organic Material	2.13
Soils	423.25
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.80E+00
Am-243	1.87E-06
Cm-244	1.53E+00
Cs-137	4.06E-07
Np-237	1.20E-04
Pu-238	1.31E-04
Pu-239	1.57E-01
Pu-240	4.20E-04
Pu-241	3.60E-03
Pu-242	9.14E-08
Sr-90	4.06E-07
Th-229	3.69E-08
Th-232	4.19E-06
U-233	1.22E-02
U-235	3.71E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D028, F001, F002, F005

TRUCON Code(s)

111/211

Waste Stream Description

Waste consists of CH-TRU soils from SWSA 5 7802N Trench area

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-TBD-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	TBD CH-TRU Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	13.5	0.0	13.5
79-gal Drum Dir Ld	1.8	0.0	1.8
Current Form Total	15.3	0.0	15.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	15.2	0.0	15.2
Final Form Total	15.2	0.0	15.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	47.92
Aluminum-based Metal/Alloys	8.71
Other Metal/Alloys	21.78
Other Inorganic Materials	4.36
Cellulosics	37.03
Rubber	30.50
Plastics	56.64
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	10.89
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	8.98E+00
Am-243	1.05E-01
Cm-244	1.12E-01
Cs-137	1.17E-02
Np-237	3.34E-03
Pu-238	1.47E+01
Pu-239	3.38E+00
Pu-240	7.72E+00
Pu-241	2.79E+00
Pu-242	7.93E-04
Pu-244	3.82E-05
Sr-90	2.71E-03
Th-229	1.15E-04
Th-230	3.77E-07
Th-232	2.67E-07
U-233	5.02E-02
U-234	1.22E-03
U-235	1.42E-05
U-236	5.97E-06
U-238	7.80E-04

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

CH-TRU Debris Waste Needing Further Evaluation

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-TBD-RH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	TBD RH-TRU Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	2.9	0.0	2.9
Cask - Misc	64.0	8.3	72.3
Current Form Total	66.9	8.3	75.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	66.1	9.4	75.5
Final Form Total	66.1	9.4	75.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	226.49
Aluminum-based Metal/Alloys	51.47
Other Metal/Alloys	46.33
Other Inorganic Materials	51.47
Cellulosics	72.06
Rubber	15.44
Plastics	41.18
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	10.29
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	6.54E-01
Am-243	4.15E-11
Cm-244	6.40E-02
Cs-137	2.76E+01
Np-237	7.06E-06
Pu-238	7.30E-01
Pu-239	1.02E-01
Pu-240	5.62E-02
Pu-241	7.45E-02
Pu-242	2.34E-07
Pu-244	5.02E-08
Sr-90	1.70E+01
Th-229	6.62E-05
Th-230	5.62E-08
Th-232	3.45E-07
U-233	2.90E-02
U-234	2.64E-04
U-235	8.35E-06
U-236	4.32E-08
U-238	1.79E-06

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011

TRUCON Code(s)

325

Waste Stream Description

RH-TRU Debris Waste Needing Further Evaluation

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-W203**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	ORNL Newly Generated Debris - Post 2013					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.0	84.9	84.9
Current Form Total	0.0	84.9	84.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.0	84.9	84.9
Final Form Total	0.0	84.9	84.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	79.33
Aluminum-based Metal/Alloys	3.85
Other Metal/Alloys	2.40
Other Inorganic Materials	30.77
Cellulosics	11.54
Rubber	3.13
Plastics	109.38
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.14E-02
Am-243	8.13E-04
Cm-244	9.79E-03
Cs-137	4.24E-02
Pu-238	8.57E-03
Pu-239	1.56E-04
Pu-240	7.37E-03
Pu-241	1.02E-01
Pu-242	1.07E-04
Sr-90	3.14E-01
U-234	1.44E-07
U-235	6.35E-09
U-236	7.25E-10
U-238	5.12E-08

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Hot Cell Debris Waste

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-W213-RH-SOILS**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2011
Stream Name	ER RH TRU Soils					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
10-gal Drum Dir Ld w/o Liner	1.6	0.0	1.6
55-gal Drum Dir Ld w/o Liner	0.2	0.0	0.2
5-gal Drum Dir Ld w/o Liner	0.0	0.0	0.0
Box - Misc	43.7	0.0	43.7
Current Form Total	45.6	0.0	45.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	10.6	0.0	10.6
Final Form Total	10.6	0.0	10.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	25.30
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	50.59
Soils	2453.73
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.06E-01
Am-243	3.26E-05
Cm-244	2.74E-04
Cs-137	1.00E+00
Np-237	1.09E-04
Pu-238	1.91E-02
Pu-239	5.18E-02
Pu-240	4.93E-04
Pu-241	1.94E-01
Pu-242	2.86E-05
Sr-90	8.23E-03
Th-229	7.63E-02
Th-230	1.29E-04
Th-232	1.22E-03
U-233	9.91E-02
U-234	5.65E-03
U-235	8.41E-05
U-236	8.91E-05
U-238	1.07E-03

No Hazardous Waste Numbers Provided

TRUCON Code(s)

311

Waste Stream Description

This waste is made up of soils.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-WSTR-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	ORNL-Liquid Waste Treatment CH-TRU Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	5.6	0.0	5.6
79-gal Drum Dir Ld	0.3	0.0	0.3
Current Form Total	5.9	0.0	5.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	5.8	0.0	5.8
Final Form Total	5.8	0.0	5.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	44.82
Aluminum-based Metal/Alloys	8.15
Other Metal/Alloys	20.37
Other Inorganic Materials	4.07
Cellulosics	34.64
Rubber	28.52
Plastics	52.97
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	10.19
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Cm-244	1.71E-03
Pu-238	7.55E-03
Pu-239	8.58E-02
Pu-240	8.05E-06
Th-230	7.60E-11
Th-232	1.66E-21
U-234	6.15E-07
U-235	2.20E-09
U-236	3.61E-12

Haz. Waste No(s).

D008

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from ORNL liquids waste system.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-Y12-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Oak Ridge Y-12 CH-TRU Debris Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.6	0.0	0.6
79-gal Drum w/ 1 - 55-gal Drum	0.6	0.0	0.6
Current Form Total	1.2	0.0	1.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	1.2	0.0	1.2
Final Form Total	1.2	0.0	1.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	52.53
Aluminum-based Metal/Alloys	9.55
Other Metal/Alloys	23.88
Other Inorganic Materials	4.78
Cellulosics	40.59
Rubber	33.43
Plastics	62.08
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	11.94
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Np-237	5.08E-03
Pu-238	1.73E-04
Pu-239	4.96E-02
Pu-240	1.04E-05
Th-229	6.54E-10
Th-230	1.78E-07
Th-232	5.14E-21
U-233	5.72E-07
U-234	7.45E-04
U-235	1.14E-04
U-236	8.01E-12
U-238	5.01E-04

Haz. Waste No(s).

D008

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from Y-12

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL105-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	105-C, 105KE, and 105-N Bldg TRU CH Non-mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	29.7	0.0	29.7
85-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Box - Misc	54.2	0.0	54.2
Uncontained	0.0	29.3	29.3
Current Form Total	84.6	29.3	113.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	37.9	0.0	37.9
SWB Dir Ld w/ Liner	68.0	30.2	98.3
Final Form Total	105.9	30.2	136.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	75.59
Aluminum-based Metal/Alloys	3.85
Other Metal/Alloys	0.00
Other Inorganic Materials	25.04
Cellulosics	15.41
Rubber	13.48
Plastics	28.50
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	11.17
Packaging Material, Rubber	0.30
Packaging Material, Steel	147.14
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.74E-01
Am-243	5.20E-04
Cm-244	9.15E-03
Cs-137	1.26E+00
Np-237	2.29E-04
Pu-238	4.43E-02
Pu-239	1.44E-01
Pu-240	5.80E-02
Pu-241	5.51E+00
Pu-242	1.72E-05
Sr-90	4.47E-01
Th-229	1.75E-13
Th-230	6.71E-10
Th-232	7.15E-16
U-233	1.99E-09
U-234	3.66E-05
U-235	2.04E-05
U-236	7.24E-06
U-238	3.33E-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

CH TRU Combustible and noncombustible debris from Hanford production reactor storage basin operations. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, cartridge-type water filters from the Primary Recirculation System, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL105-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	NLOP sludge					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	68.4	0.0	68.4
Current Form Total	68.4	0.0	68.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	68.4	0.0	68.4
Final Form Total	68.4	0.0	68.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	36.09
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	12.59
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	930.62
Solidified Inorganic Material	620.41
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.20E-01
Cs-137	1.62E+00
Np-237	9.00E-06
Pu-238	6.75E-02
Pu-239	3.38E-01
Pu-240	1.86E-01
Pu-241	7.69E+00
Pu-242	8.86E-05
Sr-90	8.08E+00
Th-229	1.49E-14
Th-230	1.65E-08
Th-232	1.22E-18
U-233	1.14E-10
U-234	5.98E-04
U-235	2.25E-05
U-236	1.65E-08
U-238	4.82E-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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL105-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	105-C, 105KE, and 105-N Bldg RH-TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.7	0.0	3.7
Box - Misc	120.5	0.0	120.5
SWB Dir Ld w/ Liner	3.8	0.0	3.8
Current Form Total	128.0	0.0	128.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	161.0	0.0	161.0
Final Form Total	161.0	0.0	161.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	106.95
Aluminum-based Metal/Alloys	5.45
Other Metal/Alloys	0.00
Other Inorganic Materials	35.42
Cellulosics	21.80
Rubber	19.07
Plastics	38.15
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	9.32E-02
Am-243	3.77E-08
Cm-244	1.00E-03
Cs-137	1.65E+00
Np-237	9.69E-07
Pu-238	2.47E-02
Pu-239	7.76E-02
Pu-240	4.22E-02
Pu-241	1.02E+00
Pu-242	1.73E-06
Sr-90	7.59E-01
Th-229	2.89E-14
Th-230	1.77E-09
Th-232	4.95E-08
U-233	6.65E-11
U-234	3.22E-05
U-235	1.61E-06
U-236	5.63E-06
U-238	3.89E-05

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)

325

Waste Stream Description

The 105-KE RH waste stream is composed solely of cartridge-type water filters from the Primary Recirculation System. The water filters, accumulated waste and associated packaging. Other 100 area drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters. The waste stream ranges from contaminated clothing to process equipment. The waste is generated from Reactor Facility/Equipment Operation and Maintenance Waste activities.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL105-09**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	105KE TRU RH Non-mixed solidified inorganics					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
85-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Sludge Transport and Storage Container	0.0	151.8	151.8
Current Form Total	0.6	151.8	152.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	1.2	624.0	625.2
Final Form Total	1.2	624.0	625.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	156.95
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	5.86
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	576.13
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.98E-02
Cs-137	2.50E-01
Np-237	1.38E-05
Pu-238	1.06E-02
Pu-239	5.27E-02
Pu-240	2.90E-02
Pu-241	1.22E+00
Pu-242	1.39E-05
Sr-90	9.35E-02
Th-229	6.44E-14
Th-230	4.26E-09
Th-232	3.49E-14
U-233	2.94E-10
U-234	9.28E-05
U-235	3.49E-06
U-236	1.41E-04
U-238	7.55E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)

311

Waste Stream Description

Solidified inorganic RH TRU waste generated from Facility/Equipment Operation and Maintenance activities at the Reactor facility.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL200-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Misc 200 Area TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	71.1	0.0	71.1
Box - Misc	46.3	0.0	46.3
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Current Form Total	119.3	0.0	119.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	88.8	0.0	88.8
SWB Dir Ld w/ Liner	60.5	0.0	60.5
Final Form Total	149.3	0.0	149.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	567.18
Aluminum-based Metal/Alloys	128.32
Other Metal/Alloys	0.00
Other Inorganic Materials	33.59
Cellulosics	24.62
Rubber	8.49
Plastics	33.60
Cement	0.00
Solidified Inorganic Material	5.39
Solidified Organic Material	0.00
Soils	2.90
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	22.54
Packaging Material, Rubber	0.42
Packaging Material, Steel	139.95
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.41E-01
Cs-137	3.38E-03
Np-237	8.79E-07
Pu-238	9.28E-04
Pu-239	6.36E-03
Pu-240	2.28E-03
Pu-241	3.45E-02
Pu-242	2.21E-07
Sr-90	2.52E-04
Th-229	1.38E-15
Th-230	3.09E-13
Th-232	4.16E-20
U-233	9.38E-12
U-234	1.34E-08
U-235	3.13E-11
U-236	3.37E-10
U-238	1.71E-16

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Containers with both combustible and noncombustible waste items from various general perations/mantenance/evaporator in 200 area. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL200-02**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Soil from Groundwater projects. And contaiminated soil from PFP					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	7.3	0.0	7.3
85-gal Drum Dir Ld w/ Liner	3.2	0.0	3.2
Uncontained	0.0	2211.4	2211.4
Current Form Total	10.5	2211.4	2221.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	10.4	0.0	10.4
SWB Dir Ld w/ Liner	0.0	2213.2	2213.2
Final Form Total	10.4	2213.2	2223.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	3.59
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	513.52
Cellulosics	4.73
Rubber	2.19
Plastics	9.25
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	543.68
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.37
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.33
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.73E-01
Cs-137	3.16E-04
Np-237	1.19E-05
Pu-238	7.65E-02
Pu-239	1.66E+00
Pu-240	4.38E-01
Pu-241	2.95E+00
Pu-242	3.31E-05
Sr-90	2.87E-04
Th-229	2.27E-15
Th-230	9.97E-13
Th-232	3.20E-19
U-233	5.16E-11
U-234	2.17E-07
U-235	1.64E-09
U-236	1.30E-08
U-238	5.13E-15

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D027, D028, D030, D039, D040, D043, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Crib and soil characterization and remediation wastes

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL201-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	201C TRU Mixed Solid Inorganic					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	11.4	0.0	11.4
Current Form Total	11.4	0.0	11.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	13.5	0.0	13.5
Final Form Total	13.5	0.0	13.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	27.63
Other Inorganic Materials	9.16
Cellulosics	64.47
Rubber	119.33
Plastics	32.23
Cement	0.00
Solidified Inorganic Material	0.93
Solidified Organic Material	0.00
Soils	314.38
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.10E+00
Cs-137	1.99E-01
Pu-238	6.87E-05
Pu-239	1.39E-01
Pu-240	3.43E-02
Pu-241	3.49E-03
Pu-242	5.00E-08
Sr-90	5.17E+00
U-238	5.18E-04

Haz. Waste No(s).

D007, D010

TRUCON Code(s)

122/222

Waste Stream Description

Generated from tank CX-70 sludge cleanout/remediation. A vacuuming process loaded sludge waste into cloth lined 16 gal drums. A 16 gal drum was placed into each 55 gal drum. Diatomaceous earth was added to ensure no free liquid process waste.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL202S-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	202S TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

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

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.0	0.0	1.0
Final Form Total	1.0	0.0	1.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	2.74
Aluminum-based Metal/Alloys	0.91
Other Metal/Alloys	0.77
Other Inorganic Materials	0.00
Cellulosics	3.34
Rubber	0.77
Plastics	53.09
Cement	0.00
Solidified Inorganic Material	3.59
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.70E-02
Cs-137	1.11E-07
Np-237	1.85E-06
Pu-238	1.08E-02
Pu-239	6.29E-02
Pu-240	2.35E-02
Pu-241	1.52E-01
Pu-242	2.70E-06
Sr-90	1.00E-07
Th-229	3.53E-16
Th-230	1.41E-13
Th-232	1.72E-20
U-233	8.03E-12
U-234	3.07E-08
U-235	6.19E-11
U-236	6.97E-10
U-238	4.19E-16

Haz. Waste No(s).

D006, D007, D008, D009

TRUCON Code(s)

125/225

Waste Stream Description

Generated from investigations at the North Sample Gallery of the 202-S Canyon (REDOX CANYON AND SERVICE FACILITY).Debris waste of personal protective equipment, sharp metal objects, and cleanup material generated in S canyon investigation, waste characterization samples. Predominant debris waste consists of over 80% plastic.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL209E-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	209E TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	12.1	0.0	12.1
85-gal Drum Dir Ld w/ Liner	1.6	0.0	1.6
Box - Misc	327.0	0.0	327.0
SWB Dir Ld w/ Liner	58.6	0.0	58.6
Current Form Total	399.3	0.0	399.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	15.4	0.0	15.4
SWB Dir Ld w/ Liner	468.7	0.0	468.7
Final Form Total	484.1	0.0	484.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	51.21
Aluminum-based Metal/Alloys	0.02
Other Metal/Alloys	0.52
Other Inorganic Materials	6.19
Cellulosics	28.57
Rubber	10.88
Plastics	24.73
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	2.34
Packaging Material, Rubber	0.20
Packaging Material, Steel	152.72
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.30E+00
Cs-137	1.12E-08
Np-237	4.43E-05
Pu-238	1.12E+00
Pu-239	7.91E+00
Pu-240	2.89E+00
Pu-241	3.36E+01
Pu-242	4.23E-04
Sr-90	1.01E-08
U-234	1.60E-04
U-235	5.84E-06
U-238	1.50E-05

Haz. Waste No(s).

D006, D007, D008, D018, D019, D043, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste generated during operations, cleanout, and D&D of the 209-E Critical Mass Laboratory (CML) at Hanford. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL209E-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	209E TRU RH Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	2.40
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.80
Cellulosics	24.04
Rubber	3.21
Plastics	23.08
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.40E+00
Np-237	6.08E-05
Pu-238	7.23E-01
Pu-239	5.59E+00
Pu-240	1.96E+00
Pu-241	7.93E+00
Pu-242	2.44E-04
Th-229	3.97E-12
Th-230	5.60E-09
Th-232	7.56E-16
U-233	4.45E-09
U-234	5.14E-05
U-235	1.27E-07
U-236	1.33E-06
U-238	8.71E-13

Haz. Waste No(s).

D006, D007, D018, D019, F002, F003, F005

TRUCON Code(s)

325

Waste Stream Description

Combustible and noncombustible debris waste generated during operations, cleanout, and D&D of the 209-E CML. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL216Z-02**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2011
Stream Name	216-Z-9 TRU Mixed Soil					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	183.5	0.0	183.5
85-gal Drum Dir Ld w/ Liner	28.7	0.0	28.7
Box - Misc	12.7	0.0	12.7
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Current Form Total	226.7	0.0	226.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	290.4	0.0	290.4
SWB Dir Ld w/ Liner	18.9	0.0	18.9
Final Form Total	309.3	0.0	309.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	2.12
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	17.18
Cellulosics	0.35
Rubber	0.00
Plastics	1.06
Cement	0.00
Solidified Inorganic Material	18.83
Solidified Organic Material	0.00
Soils	18.85
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	34.88
Packaging Material, Rubber	0.54
Packaging Material, Steel	132.15
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.19E+00
Np-237	1.45E-06
Pu-238	1.22E+00
Pu-239	1.46E+01
Pu-240	3.43E+00
Pu-241	5.40E+01
Pu-242	2.05E-04

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D039, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Soil contaminated with large quantities of plutonium, americium, organics, and neutralized acid waste solutions that were removed from the 216-Z-9 Crib. Original packaging material (e.g., 10-L stainless steel slip-lid cans, plastic bags, and vermiculite) now waste due to deterioration and TRU contamination.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL221T-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	221-T TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	6.9	0.0	6.9
Current Form Total	6.9	0.0	6.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	8.7	0.0	8.7
Final Form Total	8.7	0.0	8.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	142.38
Aluminum-based Metal/Alloys	22.44
Other Metal/Alloys	0.00
Other Inorganic Materials	11.09
Cellulosics	27.08
Rubber	11.61
Plastics	27.60
Cement	0.00
Solidified Inorganic Material	3.87
Solidified Organic Material	0.00
Soils	4.64
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.81E-02
Np-237	1.94E-07
Pu-238	2.13E-03
Pu-239	1.08E-02
Pu-240	6.11E-03
Pu-241	3.95E-02
Pu-242	2.47E-07
Th-229	1.55E-14
Th-230	4.61E-11
Th-232	6.12E-18
U-233	1.48E-11
U-234	2.58E-07
U-235	3.95E-10
U-236	6.70E-09
U-238	1.42E-15

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Materials contaminated with TRU radionuclides during characterization and certification activities (visual exam, repackaging, and removal and remediation of prohibited items) and generated as waste during maintenance and cleanup operations at 221-T. Include glovebox gloves, rags and other decontamination materials, and plastics contaminated during glovebox operations. Debris items such as equipment and room contamination materials: combustibles include plastic, shoe covers, rags, paper

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL221U-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	221U moved from RL200-01					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	9.89
Aluminum-based Metal/Alloys	1.38
Other Metal/Alloys	0.41
Other Inorganic Materials	1.84
Cellulosics	1.06
Rubber	0.25
Plastics	0.93
Cement	0.00
Solidified Inorganic Material	0.17
Solidified Organic Material	0.00
Soils	0.19
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.53E-04
Cs-137	1.50E-03
Pu-238	7.74E-05
Pu-239	3.26E-03
Pu-240	7.45E-04
Pu-241	4.66E-03
Pu-242	6.35E-08
Sr-90	1.37E-03

Haz. Waste No(s).

D006, D007, D008, D009, D011, D027, D030, D032, D033, D034, D036, D037, F001, F002

TRUCON Code(s)

122/222

Waste Stream Description

Solidified sludge and laboratory sample debris (e.g., glass sample bottles, plastic, and tape) from characterization efforts of U Plant.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL221U-09**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	U Plant Tank 10 Projected Waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Box - Misc	28.1	0.0	28.1
Current Form Total	28.1	0.0	28.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	35.6	0.0	35.6
Final Form Total	35.6	0.0	35.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	193.99
Solidified Organic Material	1.96
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.34E-01
Am-243	9.77E-09
Cm-244	2.05E-02
Cs-137	1.47E+01
Np-237	1.77E-03
Pu-238	1.85E-01
Pu-239	1.37E+00
Pu-240	3.88E-01
Pu-241	1.89E+01
Pu-242	3.92E-05
Sr-90	1.13E+01
Th-229	5.28E-12
Th-230	1.30E-07
Th-232	2.66E-07
U-233	3.77E-08
U-234	7.07E-03
U-235	7.42E-06
U-236	2.30E-08
U-238	1.39E-04

Haz. Waste No(s).

D007, D008, D010

No TRUCON Codes Provided

Waste Stream Description

RH-TRU Nitrate Salts in the heel of U Plant Tank 10. Waste is under a CERCLA ROD to dispose of TRU constituents at WIPP.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL222S-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	222S TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	54.5	0.0	54.5
85-gal Drum Dir Ld w/ Liner	1.9	0.0	1.9
Box - Misc	44.0	0.0	44.0
Current Form Total	100.4	0.0	100.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	66.8	0.0	66.8
SWB Dir Ld w/ Liner	56.7	0.0	56.7
Final Form Total	123.5	0.0	123.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	520.54
Aluminum-based Metal/Alloys	103.27
Other Metal/Alloys	0.01
Other Inorganic Materials	34.65
Cellulosics	52.66
Rubber	20.79
Plastics	58.43
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	8.69
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	20.60
Packaging Material, Rubber	0.39
Packaging Material, Steel	141.18
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.67E-01
Am-243	3.40E-07
Cs-137	1.35E-03
Np-237	2.49E-05
Pu-238	1.11E-02
Pu-239	6.03E-02
Pu-240	2.73E-02
Pu-241	7.02E-01
Pu-242	1.96E-06
Sr-90	1.20E-03
Th-229	2.26E-08
Th-230	1.32E-12
Th-232	1.99E-20
U-233	2.57E-04
U-234	1.60E-07
U-235	4.58E-09
U-236	8.07E-10
U-238	1.12E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D030, D039, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible waste and Noncombustible waste - TRU wastes were generated from multiple operations, primarily from the hot cells, the hoods, or from within the gloveboxes (for standards laboratory tasks) located in the Analytical laboratory.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL222S-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	222S TRU RH Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.8	0.0	0.8
85-gal Drum Dir Ld w/ Liner	0.3	0.0	0.3
Box - Misc	0.1	0.0	0.1
Current Form Total	1.3	0.0	1.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	2.5	0.0	2.5
Final Form Total	2.5	0.0	2.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	379.68
Aluminum-based Metal/Alloys	59.95
Other Metal/Alloys	0.00
Other Inorganic Materials	29.31
Cellulosics	72.03
Rubber	30.74
Plastics	73.76
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	10.55
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.12E-01
Am-243	1.02E-02
Cs-137	1.08E-01
Np-237	1.12E-03
Pu-238	2.32E-02
Pu-239	2.52E+00
Pu-240	6.45E-02
Pu-241	6.15E+00
Pu-242	2.24E-04
Pu-244	9.32E-07
Sr-90	1.79E-01
Th-229	7.72E-05
Th-230	7.78E-12
Th-232	1.18E-18
U-233	1.76E-01
U-234	3.36E-07
U-235	4.25E-06
U-236	9.54E-09
U-238	1.57E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D039, F001, F002, F003, F004, F005

TRUCON Code(s)

325

Waste Stream Description

Combustible waste and Noncombustible waste- TRU wastes were generated from multiple operations, primarily from the hot cells, the hoods, or from within the gloveboxes (for standards laboratory tasks) located in the Analytical laboratory.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL231Z-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	231-Z TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	147.7	0.0	147.7
85-gal Drum Dir Ld w/ Liner	13.5	0.0	13.5
Box - Misc	1054.9	0.0	1054.9
SWB Dir Ld w/ Liner	26.5	0.0	26.5
Current Form Total	1242.6	0.0	1242.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	193.9	0.0	193.9
SWB Dir Ld w/ Liner	1345.7	0.0	1345.7
Final Form Total	1539.5	0.0	1539.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	102.36
Aluminum-based Metal/Alloys	0.44
Other Metal/Alloys	1.64
Other Inorganic Materials	15.50
Cellulosics	20.06
Rubber	3.68
Plastics	26.34
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	5.72
Packaging Material, Rubber	0.24
Packaging Material, Steel	150.58
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.71E-01
Am-243	3.20E-06
Cs-137	3.87E-05
Np-237	1.46E-05
Pu-238	4.54E-02
Pu-239	3.88E-01
Pu-240	1.03E-01
Pu-241	1.26E+00
Pu-242	1.24E-05
Sr-90	3.51E-05
Th-229	2.80E-15
Th-230	5.06E-10
Th-232	7.55E-20
U-233	6.36E-11
U-234	5.51E-05
U-235	1.46E-06
U-236	3.06E-09
U-238	9.12E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D034, D035, D037, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste generated during operations, cleanout, and D&D activities of the 231-Z Building at Hanford. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. The 231-Z Building has also been called the 231-W Building, the Concentration Building, the Isolation Building, the Plutonium Metallurgical Laboratory, and the 231-Z Materials Engineering Laboratory.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL231Z-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	231Z TRU Mixed Solid Inorganic					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
85-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Current Form Total	0.6	0.0	0.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	104.98
Other Inorganic Materials	0.19
Cellulosics	6.57
Rubber	1.56
Plastics	20.58
Cement	0.00
Solidified Inorganic Material	93.37
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.85E-01
Np-237	1.86E-06
Pu-238	1.33E-04
Pu-239	4.95E-01
Pu-240	1.71E-01
Pu-241	2.09E-01
Pu-242	1.53E-05
Th-229	1.19E-13
Th-230	2.09E-12
Th-232	1.28E-16
U-233	1.28E-10
U-234	1.37E-08
U-235	1.56E-08
U-236	1.62E-07
U-238	7.58E-14

Haz. Waste No(s).

D006, D007, D008, D009, F001, F002, F003, F005

TRUCON Code(s)

122/222

Waste Stream Description

Solidified inorganic waste generated during operations, cleanout, and D&D activities of the 231-Z Building, which has also been called the 231-W Building, the Concentration Building, the Isolation Building, the Plutonium Metallurgical Laboratory, and the 231-Z Materials Engineering Laboratory.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL233S-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	233S TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	6.9	0.0	6.9
85-gal Drum Dir Ld w/ Liner	3.5	0.0	3.5
SWB Dir Ld w/ Liner	28.4	0.0	28.4
Current Form Total	38.8	0.0	38.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	10.0	0.0	10.0
SWB Dir Ld w/ Liner	34.0	0.0	34.0
Final Form Total	44.0	0.0	44.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	197.17
Aluminum-based Metal/Alloys	0.83
Other Metal/Alloys	1.80
Other Inorganic Materials	4.49
Cellulosics	13.49
Rubber	2.92
Plastics	16.01
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.52
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	9.34
Packaging Material, Rubber	0.28
Packaging Material, Steel	148.30
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.16E-01
Cs-137	3.85E-05
Np-237	1.77E-04
Pu-238	8.49E-02
Pu-239	6.31E-01
Pu-240	2.06E-01
Pu-241	2.02E+00
Pu-242	6.20E-05
Sr-90	3.50E-05
Th-229	3.38E-14
Th-230	3.15E-11
Th-232	1.50E-19
U-233	7.69E-10
U-234	3.54E-06
U-235	1.11E-07
U-236	6.09E-09
U-238	1.66E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F002, F003

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste generated during cleanout, stabilization, and D&D activities of the 233-S Building (Plutonium Concentration Facility) at Hanford. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL233S-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	233S solidified inorganic waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	4.2	0.0	4.2
Current Form Total	4.2	0.0	4.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	5.2	0.0	5.2
Final Form Total	5.2	0.0	5.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.04
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	513.33
Cellulosics	0.00
Rubber	0.04
Plastics	0.65
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.38E-02
Cs-137	1.16E-06
Np-237	6.00E-05
Pu-238	1.77E-02
Pu-239	7.02E-02
Pu-240	2.83E-02
Pu-241	1.55E-01
Pu-242	1.79E-05
Sr-90	9.66E-07
Th-229	4.59E-14
Th-230	9.28E-13
Th-232	8.27E-20
U-233	5.22E-10
U-234	1.01E-07
U-235	1.38E-10
U-236	1.68E-09
U-238	5.57E-15

Haz. Waste No(s).

D007

TRUCON Code(s)

122/222

Waste Stream Description

Solidified inorganic CH TRU waste generated from 233 Facility/Equipment Operation and Maintenance activities

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL300-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	300 Area TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	17.5	0.0	17.5
85-gal Drum Dir Ld w/ Liner	10.0	0.0	10.0
Box - Misc	89.5	0.0	89.5
SWB Dir Ld w/ Liner	18.9	0.0	18.9
Current Form Total	135.9	0.0	135.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	26.6	0.0	26.6
SWB Dir Ld w/ Liner	132.3	0.0	132.3
Final Form Total	158.9	0.0	158.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	68.30
Aluminum-based Metal/Alloys	0.09
Other Metal/Alloys	7.43
Other Inorganic Materials	30.47
Cellulosics	11.11
Rubber	2.31
Plastics	19.70
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	7.21
Packaging Material, Rubber	0.25
Packaging Material, Steel	149.64
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.69E+00
Am-243	3.18E-05
Cs-137	1.66E-04
Np-237	3.93E-05
Pu-238	4.94E-01
Pu-239	2.44E+00
Pu-240	1.13E+00
Pu-241	1.76E+01
Pu-242	2.18E-04
Sr-90	1.51E-04
Th-232	2.13E-06
U-234	5.23E-04
U-235	2.35E-05
U-238	5.51E-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

Combustible and noncombustible debris waste generated from operations, including fuel fabrication, reactor studies, research and development, maintenance, and laboratory operations in the Hanford 300 Area. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL300-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	300 Area Mixed Solidified Inorganics					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2.5	0.0	2.5
85-gal Drum Dir Ld w/ Liner	1.3	0.0	1.3
Current Form Total	3.8	0.0	3.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.7	0.0	3.7
Final Form Total	3.7	0.0	3.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	2.89
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	30.55
Cement	567.31
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.17E+00
Cs-137	5.80E-04
Np-237	1.92E-05
Pu-238	7.63E-01
Pu-239	4.01E+00
Pu-240	2.05E+00
Pu-241	3.26E+01
Pu-242	3.40E-04
Sr-90	7.21E-04
U-234	4.81E-05
U-235	1.68E-06
U-238	2.91E-05

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)

122/222

Waste Stream Description

Solidified inorganic CH TRU waste generated from operations, including fuel fabrication, reactor studies, research and development, maintenance, and laboratory operations in the Hanford 300 Area.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL300-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	300 Area TRU RH Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	28.7	0.0	28.7
85-gal Drum Dir Ld w/ Liner	1.0	0.0	1.0
Box - Misc	202.7	0.0	202.7
SWB Dir Ld w/ Liner	3.8	0.0	3.8
Current Form Total	236.1	0.0	236.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	295.8	0.0	295.8
Final Form Total	295.8	0.0	295.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	79.40
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	607.94
Cellulosics	19.85
Rubber	0.00
Plastics	4.96
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.59E+00
Am-243	1.28E-02
Cm-244	2.47E+00
Cs-137	7.26E+02
Np-237	8.84E-05
Pu-238	1.02E+00
Pu-239	2.54E-01
Pu-240	2.91E-01
Pu-241	2.56E+01
Pu-242	9.98E-04
Pu-244	1.11E-13
Sr-90	4.30E+02
Th-229	5.86E-08
Th-230	2.44E-09
Th-232	2.91E-15
U-233	6.66E-04
U-234	2.66E-04
U-235	5.39E-06
U-236	5.90E-05
U-238	1.68E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D027, D028, D029, D030, D033, D034, D036, D039, D040, D043, F001, F002, F003, F005

TRUCON Code(s)

325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL308-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	308 TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	24.5	0.0	24.5
85-gal Drum Dir Ld w/ Liner	5.2	0.0	5.2
Box - Misc	308.8	0.0	308.8
SWB Dir Ld w/ Liner	141.8	0.0	141.8
Current Form Total	480.2	0.0	480.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	31.8	0.0	31.8
SWB Dir Ld w/ Liner	529.2	0.0	529.2
Final Form Total	561.0	0.0	561.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	198.98
Aluminum-based Metal/Alloys	0.19
Other Metal/Alloys	3.74
Other Inorganic Materials	3.53
Cellulosics	7.03
Rubber	1.57
Plastics	8.09
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	3.24
Packaging Material, Rubber	0.21
Packaging Material, Steel	152.15
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.50E+01
Am-243	3.31E-06
Cs-137	3.39E-04
Np-237	6.01E-06
Pu-238	1.07E+01
Pu-239	1.69E+01
Pu-240	1.09E+01
Pu-241	2.38E+02
Pu-242	1.03E-02
Sr-90	3.08E-04
Th-232	9.45E-07
U-233	1.33E-04
U-234	2.53E-04
U-235	2.50E-05
U-238	3.62E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D030, D034, D037, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Debris waste stream associated with the 308 Bldg. fuel development laboratory, fuel fabrication capabilities, and deactivation. Waste items include plutonium alloys, casting skulls, clad plates, plastic mounts, plutonium-aluminum scrap, metal mounts, Pu pellets, rags, wipes, HEPA filters, batteries, stainless steel tubing, tape, thermometers, electrical wire, and a variety of other solid debris items.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL308-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	308 Building TRU Solid Inorganics					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
85-gal Drum Dir Ld w/ Liner	0.3	0.0	0.3
Current Form Total	0.3	0.0	0.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
Final Form Total	0.4	0.0	0.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	94.95
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	7.21
Cement	228.97
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	6.05E-01
Np-237	4.43E-06
Pu-238	1.15E-01
Pu-239	8.03E-01
Pu-240	3.05E-01
Pu-241	1.58E+00
Pu-242	3.69E-05
Th-229	1.55E-13
Th-230	9.79E-10
Th-232	1.29E-16
U-233	2.24E-10
U-234	8.60E-06
U-235	1.90E-08
U-236	2.17E-07
U-238	1.37E-13

No Hazardous Waste Numbers Provided

TRUCON Code(s)

122/222

Waste Stream Description

Waste materials consist of inorganic debris (such as aluminum and iron-based metal containers) and absorbed liquids, including oils or hydraulic fluids. Materials associated with waste packaging include plastic liners and various absorbents (including Cleanup-IV, Nochar A610, vermiculite, diatomaceous earth, and Radsorb). A limited amount of debris waste materials (glassware, rags, wipes, etc.) may also be present in the container.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL308-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	308 Building TRU RH Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	16.36
Aluminum-based Metal/Alloys	0.04
Other Metal/Alloys	2.50
Other Inorganic Materials	2.25
Cellulosics	2.88
Rubber	0.92
Plastics	6.26
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.32E-03
Cs-137	1.97E-01
Np-237	1.50E-09
Pu-238	3.01E-03
Pu-239	4.28E-04
Pu-240	7.21E-04
Sr-90	1.03E+01
Th-229	3.84E-19
Th-230	1.58E-13
Th-232	2.11E-21
U-233	6.55E-15
U-234	1.71E-08
U-235	8.43E-13
U-236	4.27E-11

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

Waste Stream Description

Debris waste stream associated with the 308 Bldg. fuel development laboratory, fuel fabrication capabilities, and deactivation. Examples of waste items in this waste stream include plutonium alloys, casting skulls, clad plates, plastic mounts, plutonium-aluminum scrap, metal mounts, Pu pellets, rags, wipes, HEPA filters, batteries, stainless steel tubing, tape, thermometers, electrical wire, and a variety of other solid debris items.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL325-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	325 TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	537.3	0.0	537.3
85-gal Drum Dir Ld w/ Liner	39.0	0.0	39.0
Box - Misc	301.5	0.0	301.5
SWB Dir Ld w/ Liner	43.5	0.0	43.5
Uncontained	0.0	34.0	34.0
Current Form Total	921.2	34.0	955.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	694.7	0.0	694.7
SWB Dir Ld w/ Liner	421.5	34.0	455.5
Final Form Total	1116.2	34.0	1150.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	72.60
Aluminum-based Metal/Alloys	0.28
Other Metal/Alloys	3.24
Other Inorganic Materials	23.16
Cellulosics	12.83
Rubber	3.32
Plastics	22.30
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.25
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	22.86
Packaging Material, Rubber	0.42
Packaging Material, Steel	139.75
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.50E+00
Am-243	3.90E-04
Cm-244	6.76E-03
Cs-137	8.47E-04
Np-237	1.73E-04
Pu-238	7.43E-01
Pu-239	1.46E+00
Pu-240	5.89E-01
Pu-241	1.06E+01
Pu-242	1.75E-04
Sr-90	8.45E-04
Th-232	1.59E-06
U-233	4.66E-05
U-234	2.70E-04
U-235	9.36E-06
U-238	9.25E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, 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

Debris waste stream containing waste materials associated with the 325 Bldg. laboratory operations, sample analysis, facility cleanout, and facility waste treatment. Operations waste includes any discarded item used in laboratory analysis (e.g., glass beakers, tweezers, latex gloves, plastic tape, glass pipettes) and facility cleanout (e.g., glassware, wipes, and equipment). Maintenance waste may include filters, wipes, and various types of gloves. Small amounts of solid sample residues (unused samples) generated during lab operations are present in the waste.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL325-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	325 TRU Mixed Solid Inorganic					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	5.4	0.0	5.4
85-gal Drum Dir Ld w/ Liner	10.0	0.0	10.0
Current Form Total	15.4	0.0	15.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	14.4	0.0	14.4
Final Form Total	14.4	0.0	14.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	77.99
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.02
Other Inorganic Materials	474.68
Cellulosics	1.99
Rubber	1.97
Plastics	18.34
Cement	40.65
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	86.18
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.16E+00
Am-243	8.44E-03
Cm-244	4.33E+00
Cs-137	6.63E-03
Np-237	2.97E-04
Pu-238	1.02E+00
Pu-239	3.62E+00
Pu-240	1.68E+00
Pu-241	4.38E+01
Pu-242	3.12E-04
Sr-90	2.58E-02
U-234	6.01E-05
U-235	2.38E-06
U-238	3.63E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D033, D034, D036, D037, D038, D039, D040, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

122/222

Waste Stream Description

The mixed solid inorganic portion of the 325 waste stream from liquid laboratory samples neutralized and solidified using nonhazardous absorbents. Small amounts of neutralized and solidified liquids from hazardous waste treatment may also be present in the waste. Corrosive liquids, such as hydrochloric acid and sodium hydroxide were neutralized and solidified in cement before being packaged as waste.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL325-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	325 TRU RH Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	32.7	0.0	32.7
85-gal Drum Dir Ld w/ Liner	2.3	0.0	2.3
Box - Misc	146.9	0.0	146.9
SWB Dir Ld w/ Liner	28.4	0.0	28.4
Uncontained	0.0	30.6	30.6
Current Form Total	210.1	30.6	240.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	262.7	31.2	293.9
Final Form Total	262.7	31.2	293.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	114.39
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	970.96
Cellulosics	0.00
Rubber	0.00
Plastics	24.40
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.94E-01
Am-243	5.51E-04
Cm-244	1.27E-01
Cs-137	1.14E+00
Np-237	3.86E-04
Pu-238	6.49E-01
Pu-239	9.62E-02
Pu-240	9.68E-02
Pu-241	7.95E+00
Pu-242	1.25E-04
Sr-90	7.88E+00
Th-229	5.45E-11
Th-232	1.68E-07
U-233	3.47E-08
U-234	5.07E-05
U-235	3.10E-06
U-236	8.51E-10
U-238	4.82E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D027, D028, D029, D030, D032, D033, D034, D036, D037, D038, D039, D040, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters. The waste is generated from R&D/R&D Laboratory Waste activities at the RADIOCHEMISTRY BUILDING.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL618-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	618 - 10&11 Burial Grounds TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Uncontained	158.2	0.0	158.2
Current Form Total	158.2	0.0	158.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	158.8	0.0	158.8
Final Form Total	158.8	0.0	158.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	13.39
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	24.10
Other Inorganic Materials	23.22
Cellulosics	1.79
Rubber	3.57
Plastics	3.57
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	8.93
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.20
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.44
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.81E+00
Cs-137	2.16E+01
Np-237	6.15E-06
Pu-238	1.92E+00
Pu-239	8.27E-01
Pu-240	7.87E+00
Pu-241	5.48E+00
Pu-242	9.97E+00
Sr-90	1.96E+01
Th-229	9.59E-15
Th-230	6.38E-10
Th-232	1.44E-16
U-233	6.55E-11
U-234	2.76E-05
U-235	4.07E-09
U-236	1.16E-06
U-238	7.73E-09

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Retrieved containerized debris waste from Burial Grounds 618 - 10 and 11

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL618-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	618 - 10&11 Burial Grounds TRU RH Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Uncontained	643.3	0.0	643.3
Current Form Total	643.3	0.0	643.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	643.3	0.0	643.3
Final Form Total	643.3	0.0	643.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	262.60
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	473.53
Other Inorganic Materials	507.76
Cellulosics	35.01
Rubber	70.03
Plastics	70.03
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	175.07
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.82E+00
Cs-137	2.16E+01
Np-237	6.17E-06
Pu-238	1.92E+00
Pu-239	8.30E-01
Pu-240	7.89E+00
Pu-241	5.50E+00
Pu-242	1.00E+01
Sr-90	1.96E+01
Th-229	9.62E-15
Th-230	6.40E-10
Th-232	1.44E-16
U-233	6.57E-11
U-234	2.77E-05
U-235	4.09E-09
U-236	1.17E-06
U-238	7.76E-09

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

Waste Stream Description

Retrieved containerized debris waste from Burial Grounds 618 - 10 and 11.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLALE-02**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2011
Stream Name	TRU Soils/Absorbents from the Arid Lands Ecology Reserve					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
Current Form Total	0.4	0.0	0.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	2.56
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	381.41
Cellulosics	0.00
Rubber	3.21
Plastics	81.41
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.24E-04
Cs-137	5.54E-07
Pu-238	4.21E-05
Pu-239	8.49E-02
Pu-240	2.75E-03
Pu-241	8.75E-03
Pu-242	2.69E-07
Pu-244	3.64E-11
Sr-90	5.05E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Currently 2 drums of soils from the 6652H building.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLARG-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Argonne Nat Lab TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	10.6	0.0	10.6
Current Form Total	10.6	0.0	10.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	13.3	0.0	13.3
Final Form Total	13.3	0.0	13.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	478.69
Aluminum-based Metal/Alloys	64.94
Other Metal/Alloys	8.00
Other Inorganic Materials	32.10
Cellulosics	78.38
Rubber	33.59
Plastics	79.87
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	21.15
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.39E+00
Np-237	3.31E-05
Pu-238	1.73E+01
Pu-239	3.29E+00
Pu-240	1.67E+00
Pu-241	1.64E+01
Pu-242	5.78E-05
Th-229	1.31E-12
Th-230	1.74E-07
Th-232	1.09E-06
U-233	1.78E-09
U-234	1.41E-03
U-235	8.43E-08
U-236	1.29E-06
U-238	2.33E-13

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be 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).

Waste Stream ID: **RLBART-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Bartlesville RH-TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	253.04
Aluminum-based Metal/Alloys	39.95
Other Metal/Alloys	0.00
Other Inorganic Materials	19.54
Cellulosics	48.01
Rubber	20.49
Plastics	49.16
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	7.03
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.15E-01
Np-237	7.12E-06
Pu-238	6.85E-07
Pu-239	5.41E-06
Pu-240	2.62E-06
Pu-241	7.06E-06
Pu-242	7.57E-10
Th-229	4.13E-13
Th-230	9.39E-15
Th-232	1.73E-21
U-233	4.68E-10
U-234	6.55E-11
U-235	1.60E-13
U-236	2.33E-12
U-238	3.52E-18

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLBAT-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Battelle Columbus TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

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	3.9	0.0	3.9
Box - Misc	20.4	0.0	20.4
Current Form Total	37.6	0.0	37.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	18.7	0.0	18.7
SWB Dir Ld w/ Liner	26.5	0.0	26.5
Final Form Total	45.2	0.0	45.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	561.11
Aluminum-based Metal/Alloys	118.24
Other Metal/Alloys	0.00
Other Inorganic Materials	35.60
Cellulosics	42.97
Rubber	16.03
Plastics	50.31
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	7.58
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.06
Packaging Material, Rubber	0.35
Packaging Material, Steel	144.05
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.70E-01
Np-237	3.08E-05
Pu-238	2.59E+00
Pu-239	2.43E-01
Pu-240	9.22E-02
Pu-241	2.08E+00
Pu-242	5.22E-06
Th-229	5.89E-15
Th-230	3.58E-09
Th-232	1.16E-07
U-233	1.34E-10
U-234	3.93E-04
U-235	1.46E-05
U-236	2.73E-09
U-238	1.24E-05

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLBAT-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	BATCO TRU RH Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	4.2	0.0	4.2
Box - Misc	0.6	0.0	0.6
Current Form Total	4.7	0.0	4.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	6.9	0.0	6.9
Final Form Total	6.9	0.0	6.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	1492.62
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	13.33
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	6.63E-01
Am-243	4.18E-03
Cm-244	3.22E-01
Cs-137	9.15E+00
Np-237	1.80E-06
Pu-238	5.07E-01
Pu-239	6.98E-02
Pu-240	1.14E-01
Pu-241	5.93E+00
Pu-242	3.04E-04
Sr-90	5.92E+00
Th-229	1.48E-12
Th-230	5.48E-09
Th-232	5.12E-15
U-233	1.89E-09
U-234	7.28E-05
U-235	2.76E-06
U-236	1.15E-05
U-238	5.34E-05

Haz. Waste No(s).

D006, D008, P015

TRUCON Code(s)

325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLBET-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Bettis TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	108.39
Aluminum-based Metal/Alloys	17.08
Other Metal/Alloys	0.00
Other Inorganic Materials	8.44
Cellulosics	20.62
Rubber	8.84
Plastics	21.01
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	2.95
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	8.54E-03
Cs-137	1.53E-04
Pu-238	3.33E-03
Pu-239	1.58E-02
Pu-240	8.88E-03
Pu-241	9.47E-02
Pu-242	3.53E-07
Sr-90	1.39E-04
U-234	2.58E-04
U-235	9.47E-06
U-238	1.00E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. Drums may be used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLBW-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Babcock and Wilcox TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	18.5	0.0	18.5
85-gal Drum Dir Ld w/ Liner	29.3	0.0	29.3
Box - Misc	127.5	0.0	127.5
Current Form Total	175.3	0.0	175.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	43.7	0.0	43.7
SWB Dir Ld w/ Liner	160.7	0.0	160.7
Final Form Total	204.3	0.0	204.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	48.08
Aluminum-based Metal/Alloys	0.21
Other Metal/Alloys	4.84
Other Inorganic Materials	31.92
Cellulosics	23.25
Rubber	4.97
Plastics	25.30
Cement	0.00
Solidified Inorganic Material	0.82
Solidified Organic Material	0.14
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.87
Packaging Material, Rubber	0.27
Packaging Material, Steel	148.59
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.50E+00
Am-243	8.84E-08
Cs-137	3.63E-04
Np-237	8.94E-06
Pu-238	3.61E-01
Pu-239	2.02E+00
Pu-240	9.61E-01
Pu-241	1.41E+01
Pu-242	1.72E-04
Sr-90	3.30E-04
U-233	1.57E-04
U-234	4.23E-05
U-235	1.13E-06
U-238	2.44E-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

Combustible and noncombustible debris waste generated from operations and decontamination and decommissioning of the Babcock and Wilcox Parks Township Site Plutonium Facility. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLBW-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Babcock & Wilcox solidified inorganics					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.5	0.0	1.5
85-gal Drum Dir Ld w/ Liner	1.3	0.0	1.3
Current Form Total	2.7	0.0	2.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2.7	0.0	2.7
Final Form Total	2.7	0.0	2.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	4.90
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	698.80
Cellulosics	0.00
Rubber	0.00
Plastics	19.59
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.32E+00
Cs-137	2.65E-07
Np-237	2.02E-05
Pu-238	9.49E-01
Pu-239	4.97E+00
Pu-240	2.53E+00
Pu-241	3.90E+01
Pu-242	4.07E-04
Sr-90	2.46E-07
Th-229	3.68E-15
Th-230	1.10E-09
Th-232	1.85E-18
U-233	8.48E-11
U-234	1.21E-04
U-235	3.70E-06
U-236	7.49E-08
U-238	6.05E-05

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D035, F001, F002, F003, F005

TRUCON Code(s)

122/222

Waste Stream Description

Solidified inorganic CH TRU waste generated from operations and decontamination and decommissioning of the Babcock and Wilcox Parks Township Site Plutonium Facility.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLBW-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Babcock and Wilcox TRU RH Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
85-gal Drum Dir Ld w/ Liner	0.3	0.0	0.3
Current Form Total	0.5	0.0	0.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	1.2	0.0	1.2
Final Form Total	1.2	0.0	1.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	4.08
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.20
Other Inorganic Materials	2.04
Cellulosics	27.35
Rubber	0.31
Plastics	18.37
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.74E-01
Np-237	9.58E-07
Pu-238	1.55E-01
Pu-239	6.09E-01
Pu-240	3.44E-01
Pu-241	1.09E+01
Pu-242	1.39E-05
Th-229	9.29E-16
Th-230	3.29E-11
Th-232	4.02E-18
U-233	7.99E-12
U-234	1.78E-06
U-235	2.40E-09
U-236	4.07E-08
U-238	8.60E-15

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, F001, F002, F003, F005

TRUCON Code(s)

325

Waste Stream Description

Combustible and noncombustible debris waste generated from operations and decontamination and decommissioning of the Babcock and Wilcox Parks Township Site Plutonium Facility. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLCFF-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Kerr McGee TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.2	0.0	1.2
85-gal Drum Dir Ld w/ Liner	2.6	0.0	2.6
Current Form Total	3.8	0.0	3.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.3	0.0	3.3
Final Form Total	3.3	0.0	3.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	478.22
Aluminum-based Metal/Alloys	2.23
Other Metal/Alloys	0.47
Other Inorganic Materials	48.06
Cellulosics	53.78
Rubber	11.64
Plastics	76.17
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.12
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.82E+00
Cs-137	8.90E-08
Np-237	9.74E-07
Pu-238	3.68E-01
Pu-239	2.23E+00
Pu-240	1.13E+00
Pu-241	1.57E+01
Pu-242	1.84E-04
Sr-90	8.07E-08
Th-229	1.11E-16
Th-230	1.38E-10
Th-232	4.85E-09
U-233	2.96E-12
U-234	1.55E-05
U-235	5.06E-07
U-236	3.35E-08
U-238	1.35E-05

Haz. Waste No(s).

D007, D008, D009, D040, F001, F002, F003

TRUCON Code(s)

125/225

Waste Stream Description

The CFFD (KM) waste stream consists of heterogeneous debris waste generated at the Cimarron Plutonium Fuel Fabrication Facility, operated by the Kerr-McGee Nuclear Corporation. This facility was a MOX fuel fabrication facility. The waste was generated during D&D activities at the facility. The waste includes typical D&D waste, e.g., paper, plastic, leaded rubber gloves, rags, glass, equipment, dissassembled gloveboxes, and HEPA filters.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLCFF-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Kerr McGee TRU Mixed Solid Inorganic					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	4.8	0.0	4.8
Current Form Total	4.8	0.0	4.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	5.0	0.0	5.0
Final Form Total	5.0	0.0	5.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	31.04
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	22.27
Other Inorganic Materials	456.10
Cellulosics	8.21
Rubber	0.99
Plastics	34.11
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.14E+00
Np-237	3.68E-07
Pu-238	3.58E+00
Pu-239	1.44E+00
Pu-240	7.05E-01
Pu-241	9.60E+00
Pu-242	8.91E-05
Th-229	2.34E-17
Th-230	1.42E-10
Th-232	5.15E-19
U-233	8.00E-13
U-234	2.06E-05
U-235	4.59E-07
U-236	2.09E-08
U-238	9.82E-06

Haz. Waste No(s).

D007, D008, D009, F001, F002, F003

TRUCON Code(s)

122/222

Waste Stream Description

Waste generated from R&D/R&D Laboratory Waste activities at the Kerr McGee.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLCH2-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Tank Farms TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

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
Current Form Total	2.1	0.0	2.1

Final 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
Final Form Total	2.1	0.0	2.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	21.50
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	19.01
Other Inorganic Materials	11.06
Cellulosics	1.61
Rubber	0.01
Plastics	1.90
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	4.76
Packaging Material, Rubber	0.23
Packaging Material, Steel	151.19
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.37E-02
Cs-137	1.96E-01
Np-237	4.44E-09
Pu-238	1.30E-03
Pu-239	9.63E-03
Pu-240	2.47E-03
Pu-241	2.33E-02
Sr-90	8.75E-01
Th-229	6.62E-08
Th-230	1.72E-14
Th-232	1.81E-21
U-233	7.53E-04
U-234	3.74E-09
U-235	9.77E-07
U-236	7.32E-11
U-238	2.13E-05

Haz. Waste No(s).

D004, D006, D007, D008, D009, D010, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

CH waste- 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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLESG-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Energy Systems Group TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	13.1	0.0	13.1
85-gal Drum Dir Ld w/ Liner	3.5	0.0	3.5
Box - Misc	14.9	0.0	14.9
Current Form Total	31.5	0.0	31.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	16.8	0.0	16.8
SWB Dir Ld w/ Liner	18.9	0.0	18.9
Final Form Total	35.7	0.0	35.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	228.99
Aluminum-based Metal/Alloys	0.68
Other Metal/Alloys	7.31
Other Inorganic Materials	30.12
Cellulosics	28.62
Rubber	19.12
Plastics	38.84
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	18.10
Packaging Material, Rubber	0.37
Packaging Material, Steel	142.75
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.21E-01
Cs-137	3.29E-03
Np-237	6.04E-06
Pu-238	1.10E-01
Pu-239	6.57E-01
Pu-240	2.99E-01
Pu-241	4.92E+00
Pu-242	5.57E-05
Sr-90	2.69E-03
Th-232	2.51E-07
U-234	1.04E-03
U-235	2.65E-05
U-238	2.59E-05

Haz. Waste No(s).

D006, D007, D008, F001, F002, F003

TRUCON Code(s)

125/225

Waste Stream Description

RLETECD waste is composed of heterogeneous debris consisting of organic and inorganic debris material generated from glove box operations at the Energy Technology Engineering Center. Examples of waste items in this waste stream include cardboard tubes, cladding material, plastic, paper, glove port flanges, rubber air hoses, electrical connectors, wooden broom handles, plexiglass windows, steel plates, glove box ventilation piping and valves, lead, stainless steel, nickel-cadmium batteries, paint brushes and rollers, full-face respirators, sphincter cans, tools, copper, poly bottles, shoe covers, aluminum, vermiculite, soda ash, mixer components, glass, rags, molybdenum plates, drying ovens, MOX ash, gloves, fittings, gas line hookups, balance weights, cloth, pumps, castings, small quantities of neutralized/solidified liquids, and concrete.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLESG-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Energy Systems Group TRU Solid Inorganics					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

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

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.0	0.0	1.0
Final Form Total	1.0	0.0	1.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	29.72
Aluminum-based Metal/Alloys	29.72
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	29.72
Rubber	29.72
Plastics	29.72
Cement	22.43
Solidified Inorganic Material	62.50
Solidified Organic Material	0.00
Soils	126.03
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	8.84E-03
Cs-137	3.73E-03
Pu-238	5.43E-03
Pu-239	1.58E-01
Pu-240	3.89E-02
Pu-241	5.76E-01
Pu-242	2.54E-06
Sr-90	3.39E-03

No Hazardous Waste Numbers Provided

TRUCON Code(s)

122/222

Waste Stream Description

Absorbed/solidified liquids from operations and decommissioning of the Nuclear Materials Development Facility.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLESG-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Energy Systems Group RH TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	12.9	0.0	12.9
85-gal Drum Dir Ld w/ Liner	9.0	0.0	9.0
Current Form Total	21.9	0.0	21.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	23.7	0.0	23.7
Final Form Total	23.7	0.0	23.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	6.97
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	33.18
Other Inorganic Materials	3.14
Cellulosics	83.05
Rubber	9.84
Plastics	44.74
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.99E-01
Cs-137	8.22E-02
Pu-238	3.81E-02
Pu-239	1.62E-01
Pu-240	8.78E-02
Pu-241	2.87E+00
Pu-242	3.38E-06
Sr-90	2.52E-02

Haz. Waste No(s).

D006, D007, D008, F001, F002, F003

TRUCON Code(s)

325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be 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. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLEXX-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Exxon TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	42.8	0.0	42.8
85-gal Drum Dir Ld w/ Liner	1.3	0.0	1.3
Current Form Total	44.1	0.0	44.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	129.8	0.0	129.8
Final Form Total	129.8	0.0	129.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	40.00
Aluminum-based Metal/Alloys	0.16
Other Metal/Alloys	7.91
Other Inorganic Materials	25.93
Cellulosics	4.75
Rubber	1.09
Plastics	5.08
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.24E+00
Np-237	6.65E-06
Pu-238	9.49E-01
Pu-239	5.93E-01
Pu-240	5.06E-01
Pu-241	1.57E+01
Pu-242	6.16E-04
U-234	5.77E-05
U-235	7.59E-07
U-238	3.04E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D030

TRUCON Code(s)

125/225

Waste Stream Description

RLEXXOD waste is comprised of heterogeneous debris consisting of organic and inorganic debris material generated from processing, cleanout, and D&D of the Mixed Oxide Fuel Fabrication Plant. Examples of waste items in this waste stream include unirradiated MOX fuel pellets, MOX powder and scrap, cladding material, MOX standards, plastic, paper, gloves and glove rings, filters, cans, HEPA filters, cardboard, electrical components, tools, scales and scale parts, screens, paint brushes, bags, floor sweepings, pots and pans, tool boxes, steel plates and racks, grinder parts, pellet trays, conduit pipe, motors, filter and vacuum hoses, and rags.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLFFTF-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	FFTF TRU Non-Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

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

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.0	0.0	1.0
Final Form Total	1.0	0.0	1.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	116.67
Aluminum-based Metal/Alloys	0.47
Other Metal/Alloys	23.06
Other Inorganic Materials	75.63
Cellulosics	13.85
Rubber	3.19
Plastics	1.54
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.15E-02
Cs-137	1.12E-02
Pu-238	3.49E-03
Pu-239	1.06E-02
Pu-240	9.15E-03
Pu-241	9.36E-02
Sr-90	7.57E-03

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris from Fast Flux Test Reactor operations, maintenance, and clean out. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLFFTF-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	FFTF RH-TRU Non-Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
85-gal Drum Dir Ld w/ Liner	0.3	0.0	0.3
Current Form Total	0.3	0.0	0.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	2.64
Aluminum-based Metal/Alloys	0.01
Other Metal/Alloys	0.52
Other Inorganic Materials	1.71
Cellulosics	0.31
Rubber	0.07
Plastics	0.33
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.20E-03
Am-243	9.32E-12
Cs-137	8.52E-01
Np-237	2.66E-09
Pu-238	1.25E-03
Pu-239	3.77E-03
Pu-240	3.24E-03
Pu-241	6.01E-02
Sr-90	9.18E-04
Th-229	6.71E-19
Th-230	6.54E-14
Th-232	9.45E-21
U-233	1.15E-14
U-234	7.10E-09
U-235	7.42E-12
U-236	1.92E-10

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

Waste Stream Description

Combustible and noncombustible debris from Fast Flux Test Reactor operations, maintenance, and clean out. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLGEV-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	GE San Jose and Vallecitos TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	17.3	0.0	17.3
85-gal Drum Dir Ld w/ Liner	7.7	0.0	7.7
Box - Misc	147.2	0.0	147.2
SWB Dir Ld w/ Liner	15.1	0.0	15.1
Current Form Total	187.3	0.0	187.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	23.9	0.0	23.9
SWB Dir Ld w/ Liner	200.3	0.0	200.3
Final Form Total	224.3	0.0	224.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	231.42
Aluminum-based Metal/Alloys	0.26
Other Metal/Alloys	4.60
Other Inorganic Materials	24.63
Cellulosics	20.70
Rubber	5.14
Plastics	51.89
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	5.03
Packaging Material, Rubber	0.23
Packaging Material, Steel	151.02
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.79E-01
Cs-137	1.37E-07
Np-237	2.02E-06
Pu-238	1.20E-01
Pu-239	6.31E-01
Pu-240	2.75E-01
Pu-241	4.67E+00
Pu-242	4.35E-05
Sr-90	1.24E-07
U-234	2.98E-04
U-235	6.32E-06
U-238	2.16E-04

Haz. Waste No(s).

D006, D007, D008, D011, D035

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste from decontmination and decommissioning of Building 102 at the GE-Vallecitos Nuclear Center. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLGEV-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	GE Vallecitos TRU Homogeneous Solids					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.5	0.0	1.5
Current Form Total	1.5	0.0	1.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	4.72
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.24
Cellulosics	5.42
Rubber	0.04
Plastics	9.41
Cement	0.00
Solidified Inorganic Material	427.04
Solidified Organic Material	6.56
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.39E+00
Cs-137	3.96E-08
Np-237	1.47E-06
Pu-238	9.68E-01
Pu-239	3.71E+00
Pu-240	2.10E+00
Pu-241	7.68E+01
Pu-242	8.45E-05
Sr-90	3.67E-08
Th-229	1.01E-16
Th-230	2.43E-11
Th-232	1.53E-18
U-233	3.32E-12
U-234	4.01E-06
U-235	4.65E-08
U-236	6.20E-08
U-238	6.41E-07

Haz. Waste No(s).

D006, D007, D008, D011, D035

TRUCON Code(s)

122/222

Waste Stream Description

Homogeneous solids from decontamination and decommissioning of Building 102 at the GE-Vallecitos Nuclear Center.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLGEV-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	GE San Jose and Vallecitos TRU RH Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Box - Misc	5.3	0.0	5.3
Current Form Total	5.3	0.0	5.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	6.9	0.0	6.9
Final Form Total	6.9	0.0	6.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	1062.29
Aluminum-based Metal/Alloys	167.73
Other Metal/Alloys	0.00
Other Inorganic Materials	82.01
Cellulosics	201.53
Rubber	86.00
Plastics	206.38
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	29.52
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.73E+00
Cs-137	1.37E+00
Np-237	1.60E-05
Pu-238	7.22E-02
Pu-239	9.17E+01
Pu-240	9.54E+00
Pu-241	2.01E-01
Pu-242	3.86E-01
Sr-90	1.03E+00
Th-229	8.02E-13
Th-230	8.52E-10
Th-232	5.47E-15
U-233	9.75E-10
U-234	6.39E-06
U-235	2.53E-06
U-236	7.92E-06
U-238	1.68E-09

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

Waste Stream Description

Combustible and noncombustible debris waste from decontmination and decommissioning of Building 102 at the GE-Vallecitos Nuclear Center. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLHAN-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Trench Designation waste stream					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	77.6	0.0	77.6
85-gal Drum Dir Ld w/ Liner	108.2	0.0	108.2
Box - Misc	226.3	0.0	226.3
SWB Dir Ld w/ Liner	177.7	0.0	177.7
Current Form Total	589.8	0.0	589.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	165.6	0.0	165.6
SWB Dir Ld w/ Liner	461.2	0.0	461.2
Final Form Total	626.7	0.0	626.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	24.37
Aluminum-based Metal/Alloys	0.09
Other Metal/Alloys	5.76
Other Inorganic Materials	8.03
Cellulosics	21.04
Rubber	7.25
Plastics	25.25
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	10.68
Packaging Material, Rubber	0.29
Packaging Material, Steel	147.45
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.50E-01
Cs-137	8.82E-08
Np-237	1.01E-06
Pu-238	7.06E-02
Pu-239	7.28E-01
Pu-240	2.54E-01
Pu-241	2.58E+00
Pu-242	3.82E-05
Sr-90	8.00E-08
Th-229	1.75E-16
Th-230	9.20E-13
Th-232	1.85E-19
U-233	4.09E-12
U-234	2.00E-07
U-235	7.17E-10
U-236	7.52E-09
U-238	5.93E-15

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D032, D033, D034, D035, D037, D038, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible TRU debris waste retrieved from the Hanford low-level burial grounds that cannot be identified or assigned to an original generator. Combustible waste may include wood, plastics, paper, absorbents, rubber, and rags. Noncombustible waste may include failed machinery, tools, glass, concrete, plumbing, and fixtures.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLHAN-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Trench Designation waste stream					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Box - Misc	14.5	0.0	14.5
SWB Dir Ld w/ Liner	3.8	0.0	3.8
Current Form Total	18.5	0.0	18.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	23.7	0.0	23.7
Final Form Total	23.7	0.0	23.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	31.99
Aluminum-based Metal/Alloys	0.11
Other Metal/Alloys	7.45
Other Inorganic Materials	10.55
Cellulosics	27.83
Rubber	9.42
Plastics	33.62
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.94E-01
Am-243	2.66E-06
Cs-137	6.58E-02
Np-237	2.90E-06
Pu-238	1.76E-02
Pu-239	1.77E-01
Pu-240	2.86E-02
Pu-241	1.09E+00
Pu-242	1.14E-06
Sr-90	5.02E-02
U-233	8.43E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D034, D035, D037, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

325

Waste Stream Description

Combustible and noncombustible RH-TRU debris waste retrieved from the Hanford low-level burial grounds that cannot be identified or assigned to an original generator. Combustible waste may include wood, plastics, paper, absorbents, rubber, and rags. Noncombustible waste may include failed machinery, tools, glass, concrete, plumbing, and fixtures.

Waste Stream ID: **RLIAEA-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	International Atomic Energy Agency TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
Final Form Total	0.4	0.0	0.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	552.00
Aluminum-based Metal/Alloys	87.00
Other Metal/Alloys	0.00
Other Inorganic Materials	43.00
Cellulosics	105.00
Rubber	45.00
Plastics	107.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	15.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.88E+00
Cs-137	4.23E-05
Np-237	6.10E-07
Pu-238	1.02E+00
Pu-239	5.31E-01
Pu-240	6.83E-01
Pu-241	4.26E+00
Pu-242	1.01E-03
Sr-90	3.85E-05
Th-229	3.89E-17
Th-230	1.32E-11
Th-232	4.98E-19
U-233	1.33E-12
U-234	2.88E-06
U-235	5.23E-10
U-236	2.02E-08
U-238	1.56E-13

No Hazardous Waste Numbers Provided

TRUCON Code(s)

122/222

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLMLB-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Lawrence Berkeley Nat Lab TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	401.22
Aluminum-based Metal/Alloys	63.24
Other Metal/Alloys	0.00
Other Inorganic Materials	31.25
Cellulosics	76.32
Rubber	32.71
Plastics	77.77
Cement	0.00
Solidified Inorganic Material	10.90
Solidified Organic Material	0.00
Soils	13.08
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.36E-01
Cm-244	2.12E+01
Np-237	1.14E-06
Pu-238	1.75E-02
Pu-239	8.34E-02
Pu-240	1.66E-01
Pu-241	4.47E-01
Pu-242	1.90E-06
Th-229	5.58E-14
Th-230	2.22E-10
Th-232	6.01E-17
U-233	6.79E-11
U-234	1.61E-06
U-235	2.38E-09
U-236	1.01E-07
U-238	8.55E-15

Haz. Waste No(s).

D005, D007, D008, D009, D011, D019, F002, F003, F005

TRUCON Code(s)

325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. Drums may be used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLMLL-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Lawrence Livermore TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
85-gal Drum Dir Ld w/ Liner	0.3	0.0	0.3
Current Form Total	0.7	0.0	0.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.0	0.0	1.0
Final Form Total	1.0	0.0	1.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	393.83
Aluminum-based Metal/Alloys	62.07
Other Metal/Alloys	0.00
Other Inorganic Materials	30.68
Cellulosics	74.91
Rubber	32.11
Plastics	76.34
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	10.70
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	8.35E-02
Np-237	9.25E-07
Pu-238	9.76E-03
Pu-239	5.00E-02
Pu-240	2.82E-02
Pu-241	1.74E-01
Pu-242	1.14E-06
Th-229	7.76E-14
Th-230	2.24E-10
Th-232	2.98E-17
U-233	7.22E-11
U-234	1.22E-06
U-235	1.87E-09
U-236	3.18E-08
U-238	6.72E-15

Haz. Waste No(s).

D006, D007, D008, D011

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLP11-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	P11 Criticality Facility TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Box - Misc	51.2	0.0	51.2
Current Form Total	51.2	0.0	51.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	64.3	0.0	64.3
Final Form Total	64.3	0.0	64.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	22.61
Aluminum-based Metal/Alloys	11.34
Other Metal/Alloys	0.00
Other Inorganic Materials	22.61
Cellulosics	11.28
Rubber	0.00
Plastics	11.28
Cement	11.34
Solidified Inorganic Material	0.10
Solidified Organic Material	0.10
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.20
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.44
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.41E-02
Np-237	1.41E-08
Pu-238	9.73E-03
Pu-239	3.73E-02
Pu-240	2.11E-02
Pu-241	7.73E-01
Pu-242	8.49E-07
Th-229	8.95E-19
Th-230	1.27E-13
Th-232	1.54E-20
U-233	3.06E-14
U-234	2.76E-08
U-235	3.67E-11
U-236	6.24E-10
U-238	1.32E-16

Haz. Waste No(s).

D005, D006, D007

TRUCON Code(s)

125/225

Waste Stream Description

Misc. demolition debris.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPFP-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	2345Z TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1556.3	0.0	1556.3
85-gal Drum Dir Ld w/ Liner	174.8	0.0	174.8
Box - Misc	4329.5	0.0	4329.5
SWB Dir Ld w/ Liner	310.0	0.0	310.0
Uncontained	0.0	2009.0	2009.0
Current Form Total	6370.5	2009.0	8379.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2036.9	0.0	2036.9
SWB Dir Ld w/ Liner	5722.9	2009.1	7732.0
Final Form Total	7759.9	2009.1	9768.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	63.17
Aluminum-based Metal/Alloys	0.31
Other Metal/Alloys	1.36
Other Inorganic Materials	10.04
Cellulosics	15.74
Rubber	8.91
Plastics	24.80
Cement	0.00
Solidified Inorganic Material	0.02
Solidified Organic Material	0.02
Soils	0.18
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.68
Packaging Material, Rubber	0.27
Packaging Material, Steel	148.71
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.47E+00
Am-243	4.68E-07
Cs-137	1.24E-05
Np-237	4.03E-05
Pu-238	7.16E-01
Pu-239	5.06E+00
Pu-240	1.66E+00
Pu-241	2.41E+01
Pu-242	3.16E-04
Sr-90	1.13E-05
Th-232	3.55E-08
U-233	2.25E-04
U-234	2.27E-04
U-235	6.49E-06
U-236	2.33E-10
U-238	1.19E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D032, D034, D035, D036, D037, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste generated from operations, maintenance, and D&D activities at the Plutonium Finishing Plant (PFP), which includes the 234-5Z, 232-Z, 236-Z, 2736-ZB, 242-Z, and 291-Z Buildings. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPFP-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	PFP Absorbed Plutonium Nitrate Solutions					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	13.9	0.0	13.9
85-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Current Form Total	14.6	0.0	14.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	15.2	0.0	15.2
Final Form Total	15.2	0.0	15.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	3.34
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.01
Other Inorganic Materials	0.23
Cellulosics	3.95
Rubber	0.04
Plastics	11.12
Cement	0.00
Solidified Inorganic Material	396.63
Solidified Organic Material	18.94
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.09E+00
Cs-137	3.99E-06
Np-237	3.62E-05
Pu-238	1.89E+00
Pu-239	1.44E+01
Pu-240	4.48E+00
Pu-241	6.43E+01
Pu-242	8.31E-04
Sr-90	3.62E-06
U-234	1.08E-03
U-235	5.36E-06
U-238	4.39E-05

Haz. Waste No(s).

D004, D006, D007, D008, D010, D011

TRUCON Code(s)

114/214

Waste Stream Description

Solidified inorganic waste generated from operations, maintenance, and D&D activities at the 325 Laboratory, the 209-E Critical Mass Laboratory, and the Plutonium Reclamation Facility (Bldg 236-Z) at the Plutonium Finishing Plant (PFP).

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPFP-04**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2011
Stream Name	PFP Comprehensive Homogenous Solids					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	15.8	0.0	15.8
85-gal Drum Dir Ld w/ Liner	2.3	0.0	2.3
Current Form Total	18.1	0.0	18.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	19.6	0.0	19.6
Final Form Total	19.6	0.0	19.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	17.98
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.50
Other Inorganic Materials	90.37
Cellulosics	11.72
Rubber	0.23
Plastics	16.66
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.41
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.55E+00
Cs-137	1.30E-04
Np-237	3.11E-05
Pu-238	8.39E-01
Pu-239	9.53E+00
Pu-240	2.69E+00
Pu-241	4.01E+01
Pu-242	3.18E-04
Sr-90	1.18E-04
U-234	1.87E-04
U-235	6.24E-06
U-238	9.36E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D030, D032, D033, F001, F002, F003, F005

TRUCON Code(s)

112/212

Waste Stream Description

Homogenous solids generated from operations, maintenance, and D&D activities at the Plutonium Finishing Plant (PFP), which includes the 234-5Z, 232-Z, 236-Z, 2736-ZB, 242-Z, and 291-Z Buildings.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPFP-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	2345Z RH-TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	18.3	0.0	18.3
85-gal Drum Dir Ld w/ Liner	7.7	0.0	7.7
Uncontained	0.0	183.0	183.0
Current Form Total	26.0	183.0	209.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	29.3	183.5	212.8
Final Form Total	29.3	183.5	212.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	34.01
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	20.82
Other Inorganic Materials	17.54
Cellulosics	4.81
Rubber	9.39
Plastics	26.22
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.64E+00
Cs-137	5.47E-06
Np-237	9.06E-06
Pu-238	4.25E-01
Pu-239	2.36E+00
Pu-240	8.64E-01
Pu-241	1.87E+01
Pu-242	1.63E-04
Sr-90	4.98E-06
U-234	8.85E-06
U-235	2.96E-07
U-236	7.53E-10
U-238	5.84E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D030, F001, F002, F003, F004, F005

TRUCON Code(s)

325

Waste Stream Description

Combustible and noncombustible debris waste generated from operations, maintenance, and D&D activities at the Plutonium Finishing Plant (PFP), which includes the 234-5Z, 232-Z, 236-Z, 2736-ZB, 242-Z, and 291-Z Buildings. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPURX-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	202A and 202AL TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	309.5	0.0	309.5
85-gal Drum Dir Ld w/ Liner	2.9	0.0	2.9
Box - Misc	260.2	0.0	260.2
SWB Dir Ld w/ Liner	7.6	0.0	7.6
Current Form Total	580.2	0.0	580.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	387.3	0.0	387.3
SWB Dir Ld w/ Liner	334.5	0.0	334.5
Final Form Total	721.8	0.0	721.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	37.38
Aluminum-based Metal/Alloys	0.13
Other Metal/Alloys	0.44
Other Inorganic Materials	11.61
Cellulosics	14.97
Rubber	14.29
Plastics	25.30
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.01
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	20.45
Packaging Material, Rubber	0.39
Packaging Material, Steel	141.28
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.74E+00
Am-243	6.24E-07
Cs-137	1.54E-02
Np-237	8.80E-06
Pu-238	1.88E+00
Pu-239	9.70E+00
Pu-240	3.70E+00
Pu-241	1.21E+02
Pu-242	8.69E-04
Sr-90	1.40E-02
U-233	2.30E-03
U-234	5.36E-06
U-235	1.77E-07
U-238	2.90E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D034, D035, D037, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste generated from facility/equipment operation and maintenance, and analytical laboratory waste activities at the Plutonium Uranium Extraction Facility. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPURX-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	202A & 202AL TRU RH Non-mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	13.1	0.0	13.1
Box - Misc	11.5	0.0	11.5
Current Form Total	24.6	0.0	24.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	31.8	0.0	31.8
Final Form Total	31.8	0.0	31.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	21.10
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.53
Other Inorganic Materials	15.83
Cellulosics	10.55
Rubber	35.88
Plastics	26.38
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	6.61E-02
Np-237	4.50E-07
Pu-238	2.86E-03
Pu-239	9.11E-03
Pu-240	2.17E-03
Pu-241	5.24E-01
Pu-242	1.19E-07
Th-229	1.88E-14
Th-230	4.82E-11
Th-232	1.73E-18
U-233	2.41E-11
U-234	3.05E-07
U-235	2.96E-10
U-236	2.13E-09
U-238	6.07E-16

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011

TRUCON Code(s)

325

Waste Stream Description

Combustible and noncombustible debris waste generated from facility/equipment operation and maintenance, and analytical laboratory waste activities at the Plutonium Uranium Extraction Facility. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLRFET-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Rocky Flats TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	198.0	0.0	198.0
85-gal Drum Dir Ld w/ Liner	6.8	0.0	6.8
Current Form Total	204.8	0.0	204.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	253.1	0.0	253.1
Final Form Total	253.1	0.0	253.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	362.70
Aluminum-based Metal/Alloys	50.51
Other Metal/Alloys	15.18
Other Inorganic Materials	67.36
Cellulosics	38.72
Rubber	9.19
Plastics	34.16
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.01
Soils	6.41
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.13E-01
Np-237	2.77E-06
Pu-238	3.43E-03
Pu-239	1.61E-02
Pu-240	9.10E-03
Pu-241	9.54E-02
Pu-242	3.68E-07
Th-229	1.29E-13
Th-230	3.75E-11
Th-232	4.85E-18
U-233	1.62E-10
U-234	2.92E-07
U-235	4.29E-10
U-236	7.29E-09
U-238	1.54E-15

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLSAN-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	GE San Jose TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.3	0.0	3.3
Current Form Total	3.3	0.0	3.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	4.2	0.0	4.2
Final Form Total	4.2	0.0	4.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	233.45
Aluminum-based Metal/Alloys	0.23
Other Metal/Alloys	5.58
Other Inorganic Materials	21.84
Cellulosics	18.96
Rubber	4.64
Plastics	49.67
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.29E+01
Np-237	1.04E-04
Pu-238	1.67E+00
Pu-239	7.93E+00
Pu-240	4.47E+00
Pu-241	4.47E+01
Pu-242	1.79E-04
Th-229	4.76E-12
Th-230	1.98E-08
Th-232	2.57E-15
U-233	6.00E-09
U-234	1.48E-04
U-235	2.19E-07
U-236	3.71E-06
U-238	7.79E-13

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste from decontmination and decommissioning at the GE-San Jose Nuclear Center. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLSWO-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	SWOC TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	31.4	0.0	31.4
85-gal Drum Dir Ld w/ Liner	12.6	0.0	12.6
Box - Misc	166.8	0.0	166.8
SWB Dir Ld w/ Liner	49.1	0.0	49.1
Uncontained	0.0	7.8	7.8
Current Form Total	259.9	7.8	267.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	41.8	0.0	41.8
SWB Dir Ld w/ Liner	258.9	9.5	268.4
Final Form Total	300.7	9.5	310.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	21.64
Aluminum-based Metal/Alloys	0.36
Other Metal/Alloys	0.64
Other Inorganic Materials	4.47
Cellulosics	13.25
Rubber	47.39
Plastics	50.16
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.10
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	6.04
Packaging Material, Rubber	0.24
Packaging Material, Steel	150.38
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.00E-01
Am-243	6.41E-08
Cs-137	3.46E-05
Np-237	4.90E-06
Pu-238	1.20E-01
Pu-239	9.01E-01
Pu-240	2.98E-01
Pu-241	4.56E+00
Pu-242	4.53E-05
Sr-90	3.14E-05
U-234	6.87E-06
U-235	2.52E-07
U-238	1.85E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D034, D035, D037, D039, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste generated from operations, maintenance, and clean up at the Hanford Solid Waste Operations Complex facilities. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLWAR-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Ward TRU Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	26.8	0.0	26.8
85-gal Drum Dir Ld w/ Liner	10.6	0.0	10.6
Box - Misc	328.3	0.0	328.3
Current Form Total	365.8	0.0	365.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	36.8	0.0	36.8
SWB Dir Ld w/ Liner	412.0	0.0	412.0
Final Form Total	448.8	0.0	448.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	88.52
Aluminum-based Metal/Alloys	0.40
Other Metal/Alloys	1.93
Other Inorganic Materials	14.40
Cellulosics	18.71
Rubber	4.91
Plastics	27.66
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.01
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	4.14
Packaging Material, Rubber	0.22
Packaging Material, Steel	151.58
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.08E-01
Cs-137	4.22E-08
Np-237	3.74E-06
Pu-238	2.65E-01
Pu-239	3.28E-01
Pu-240	2.08E-01
Pu-241	5.63E+00
Pu-242	1.63E-04
Sr-90	3.84E-08
Th-232	1.31E-08
U-234	1.51E-04
U-235	5.64E-06
U-238	3.12E-05

Haz. Waste No(s).

D007, D008, D009, D035, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste generated during decontamination and decommissioing of the Westinghouse Advanced Reactors Division facility in Cheswick, PA. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLWAR-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	WARD solidified inorganics					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	4.8	0.0	4.8
85-gal Drum Dir Ld w/ Liner	1.6	0.0	1.6
Current Form Total	6.4	0.0	6.4

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

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.80
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.11
Other Inorganic Materials	0.00
Cellulosics	3.20
Rubber	0.00
Plastics	41.39
Cement	401.34
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	6.23E-01
Cs-137	1.04E-07
Np-237	2.16E-06
Pu-238	1.65E-01
Pu-239	5.44E-01
Pu-240	2.64E-01
Pu-241	5.36E+00
Pu-242	1.04E-04
Th-229	3.03E-15
Th-230	2.96E-09
Th-232	1.74E-18
U-233	2.43E-11
U-234	1.08E-04
U-235	5.22E-06
U-236	2.35E-08
U-238	5.00E-06

Haz. Waste No(s).

D007, D008, D009, D035, F001, F002, F003, F005

TRUCON Code(s)

122/222

Waste Stream Description

Solidified inorganic waste generated during decontamination and decommissioing of the Westinghouse Advanced Reactors Division facility in Cheswick, PA.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLWTP-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Waste Treatment Plant TRU RH Mixed Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Uncontained	0.0	74.5	74.5
Current Form Total	0.0	74.5	74.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	0.0	74.9	74.9
Final Form Total	0.0	74.9	74.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	44.94
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	11.92
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.25E-03
Cs-137	1.33E+00
Np-237	4.48E-06
Pu-238	3.06E-03
Pu-239	1.49E-03
Pu-240	3.18E-04
Pu-241	7.81E-04
Sr-90	1.50E+00
Th-229	1.84E-08
Th-230	3.26E-10
Th-232	3.44E-17
U-233	4.18E-05
U-234	7.11E-06
U-235	2.79E-07
U-236	1.39E-07
U-238	6.27E-06

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

Waste Stream Description

RH debris waste generated from future WTP operations

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SA-W135**

Appendix A

Waste Profile Report

Site	Sandia National Laboratory - Albuquerque	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	TRU Waste from SNL/NM - Remote Handled					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	2.1	0.0	2.1
Current Form Total	2.1	0.0	2.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	2.5	0.0	2.5
Final Form Total	2.5	0.0	2.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	50.00
Aluminum-based Metal/Alloys	8.13
Other Metal/Alloys	3.08
Other Inorganic Materials	6.21
Cellulosics	4.53
Rubber	1.28
Plastics	6.69
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.70
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.59E-01
Am-243	2.69E-05
Cs-137	1.27E+01
Np-237	1.33E-06
Pu-238	1.38E-01
Pu-239	2.39E-01
Pu-240	1.69E-02
Pu-241	1.63E+00
Pu-242	1.44E-05
Sr-90	4.61E+00
U-233	4.81E-09
U-234	8.73E-05
U-235	4.89E-06
U-236	2.11E-07
U-238	1.22E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D035, D038, F002, F005

TRUCON Code(s)

325

Waste Stream Description

Heterogeneous RH debris from SNL/NM Hot Cell Facility D&D Project and other miscellaneous waste generators.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SA-W136**

Appendix A

Waste Profile Report

Site	Sandia National Laboratory - Albuquerque	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Uncategorized Metal Waste			**Inventory Date**	12/31/2011
Stream Name	CH TRU Debris waste from Z-machine					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.4	5.0	5.4
Current Form Total	0.4	5.0	5.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.4	5.0	5.4
Final Form Total	0.4	5.0	5.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	1848.56
Aluminum-based Metal/Alloys	25.00
Other Metal/Alloys	28.61
Other Inorganic Materials	0.19
Cellulosics	0.00
Rubber	2.14
Plastics	1.55
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	1.84
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.96E-02
Np-237	1.54E-08
Pu-238	5.18E-02
Pu-239	1.65E+00
Pu-240	3.89E-01
Pu-241	2.59E+00
Pu-242	1.32E-05
Th-229	9.63E-19
Th-230	6.75E-13
Th-232	2.84E-19
U-233	3.31E-14
U-234	1.47E-07
U-235	1.62E-09
U-236	1.15E-08
U-238	2.05E-15

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

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SA-W137**

Appendix A

Waste Profile Report

Site	Sandia National Laboratory - Albuquerque	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	CH TRU solidified waste					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
20-gal Pail	0.1	0.0	0.1
Current Form Total	0.1	0.0	0.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.02
Solidified Inorganic Material	27.40
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	9.09E-06
Pu-239	6.25E-03
Pu-240	6.15E-04
Pu-241	6.49E-04

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Solidified PuNO3 sample used for instrumental analysis

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SA-W138M**

Appendix A

Waste Profile Report

Site	Sandia National Laboratory - Albuquerque	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH TRU sealed source					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Bag	0.0	0.0	0.0
Current Form Total	0.0	0.0	0.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.01
Other Inorganic Materials	0.05
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.96E-05
Np-237	7.84E-10

Haz. Waste No(s).

D011

TRUCON Code(s)

125/225

Waste Stream Description

Sealed source removed from analytical instrumentation

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-221H-PuOx**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	221H Pu Oxide CH TRU Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal POC - 12" w/ Liner	19.3	0.0	19.3
Current Form Total	19.3	0.0	19.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal POC - 12" w/ Liner	19.1	0.0	19.1
Final Form Total	19.1	0.0	19.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	5.05
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	1.36
Other Inorganic Materials	11.81
Cellulosics	0.00
Rubber	0.00
Plastics	1.03
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	135.10
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	528.85
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.85E+00
Np-237	3.72E-05
Pu-238	1.17E+00
Pu-239	2.76E+01
Pu-240	6.65E+00
Pu-241	7.33E+01
Pu-242	9.22E-04

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

The plutonium oxide material is being blended and packaged specifically for disposal at WIPP.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-AGNS-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	SR-AGNS-HET Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Current Form Total	0.6	0.0	0.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	1.89
Aluminum-based Metal/Alloys	0.01
Other Metal/Alloys	0.47
Other Inorganic Materials	0.76
Cellulosics	0.38
Rubber	0.16
Plastics	1.58
Cement	0.00
Solidified Inorganic Material	0.01
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.66E-02
Am-243	1.81E-07
Cs-137	8.61E-07
Np-237	1.82E-05
Pu-238	8.29E-02
Pu-239	2.47E-02
Pu-240	1.50E-02
Pu-241	7.79E-02
Pu-242	6.80E-06
Sr-90	8.22E-07
Th-229	8.96E-09
Th-230	6.08E-09
Th-232	8.30E-09
U-233	3.29E-06
U-234	2.53E-05
U-235	1.82E-07
U-236	1.38E-08
U-238	3.70E-06

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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-AGNS-HOM**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	SR-AGNS-HOM					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.2	0.0	3.2
Current Form Total	3.2	0.0	3.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	7.6	0.0	7.6
Final Form Total	7.6	0.0	7.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	39.08
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	518.35
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.77E-01
Np-237	2.24E-04
Pu-238	2.08E-01
Pu-239	4.44E-01
Pu-240	1.05E-01
Pu-241	1.07E+00
Pu-242	1.83E-05
Th-229	4.08E-11
Th-230	1.13E-08
Th-232	7.35E-17
U-233	3.00E-08
U-234	4.94E-05
U-235	1.44E-06
U-236	9.61E-08
U-238	3.07E-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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-BCLDP.003.001**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2011
Stream Name	BCL JN-1 CH TRU Homogeneous Sludge					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Current Form Total	0.6	0.0	0.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.53
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.08
Cellulosics	0.62
Rubber	0.00
Plastics	2.03
Cement	0.00
Solidified Inorganic Material	30.58
Solidified Organic Material	54.50
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	8.85E-03
Am-243	3.60E-05
Cm-244	2.33E-03
Cs-137	7.87E-02
Np-237	4.62E-07
Pu-238	4.80E-03
Pu-239	7.23E-04
Pu-240	1.19E-03
Pu-241	5.39E-02
Pu-242	2.92E-06
Sr-90	3.91E-02
Th-229	4.26E-14
Th-230	2.73E-10
Th-232	1.29E-16
U-233	6.83E-11
U-234	3.76E-06
U-235	1.22E-07
U-236	3.27E-07
U-238	7.23E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D019, F002, F005

TRUCON Code(s)

127/227

Waste Stream Description

This waste consists of CH Hydraulic Sludge and Debris

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-BCLDP.004.004**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU Cartridge Water Filters(S5000)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/o Liners	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	10.42
Cellulosics	9.93
Rubber	0.38
Plastics	1.91
Cement	0.00
Solidified Inorganic Material	2.91
Solidified Organic Material	3.79
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.09E-02
Cm-244	1.47E-02
Np-237	2.84E-08
Pu-238	4.21E-03
Pu-239	4.36E-04
Pu-240	7.32E-04
Sr-90	9.12E-01
Th-229	1.31E-13
Th-230	4.51E-10
Th-232	4.68E-16
U-233	1.86E-10
U-234	6.18E-06
U-235	8.92E-08
U-236	1.19E-06
U-238	1.73E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D019, F002, F005

TRUCON Code(s)

119/219

Waste Stream Description

This waste consists of CH Cartridge Water Filters

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-BCLDP-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	BCL JN-4 CH TRU Heterogeneous Debris					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.1	0.0	1.1
SWB Dir Ld w/o Liner	10.8	0.0	10.8
Current Form Total	11.9	0.0	11.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/o Liner	11.3	0.0	11.3
SWB w/ 4 - 55-gal Drums w/ Liners	3.8	0.0	3.8
Final Form Total	15.1	0.0	15.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	147.18
Aluminum-based Metal/Alloys	1.51
Other Metal/Alloys	0.75
Other Inorganic Materials	3.01
Cellulosics	39.15
Rubber	8.66
Plastics	60.23
Cement	0.00
Solidified Inorganic Material	116.31
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	4.07
Packaging Material, Rubber	0.25
Packaging Material, Steel	167.86
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.02E-02
Np-237	5.00E-08
Pu-238	5.46E+00
Pu-239	1.96E-02
Pu-240	9.09E-03
Pu-241	1.43E-01
Pu-242	2.81E-06
Th-229	1.96E-16
Th-230	4.73E-09
Th-232	4.25E-19
U-233	8.45E-13
U-234	1.27E-04
U-235	1.55E-10
U-236	2.15E-09
U-238	3.49E-15

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, F002, F005

TRUCON Code(s)

121/221

Waste Stream Description

Heterogenous debris waste from the D&D of Battelle Columbus Lab Building JN-4

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-KAC-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH TRU Heterogeneous debris from the K Area Plutonium surveillance program					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	1.3	8.4	9.7
Current Form Total	1.3	8.4	9.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	1.2	8.3	9.6
Final Form Total	1.2	8.3	9.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	24.60
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	2.28
Rubber	21.07
Plastics	158.65
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.53E-01
Np-237	5.55E-06
Pu-238	2.39E-01
Pu-239	2.02E+00
Pu-240	5.24E-01
Pu-241	4.85E+00
Pu-242	1.73E-04
Th-229	8.73E-15
Th-230	2.84E-11
Th-232	3.45E-18
U-233	6.78E-11
U-234	2.05E-06
U-235	3.85E-06
U-236	4.66E-08
U-238	1.35E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

This waste stream consists of plutonium contaminated debris resulting from destructive and non-destructive containers used to store plutonium material

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-LA-PAD1**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH TRU Heterogeneous debris from the Los Alamos Scientific Laboratory (LASL)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	27.1	0.0	27.1
Current Form Total	27.1	0.0	27.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/o Liners	102.1	0.0	102.1
Final Form Total	102.1	0.0	102.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	18.69
Aluminum-based Metal/Alloys	0.01
Other Metal/Alloys	0.27
Other Inorganic Materials	2.18
Cellulosics	2.61
Rubber	2.29
Plastics	2.21
Cement	0.00
Solidified Inorganic Material	0.01
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.10E-01
Am-243	1.31E-07
Cs-137	2.54E-07
Np-237	1.52E-05
Pu-238	8.19E+01
Pu-239	1.28E-01
Pu-240	8.93E-02
Pu-241	3.65E-01
Pu-242	2.83E-04
Sr-90	3.20E-07
Th-229	2.09E-07
Th-230	9.42E-06
Th-232	1.05E-16
U-233	5.95E-05
U-234	3.08E-02
U-235	2.75E-07
U-236	1.06E-07
U-238	1.76E-12

Haz. Waste No(s).

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

TRUCON Code(s)

125/225, 154

Waste Stream Description

This CH TRU waste stream consists of debris and Impure Oxide shipped to the SRS from the LASL in 1971 and 1972.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-MD-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU/F listed solvents - Heterogeneous debris from Mound Laboratories					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.7	0.0	1.7
55-gal Drum Dir Ld w/o Liner	0.6	0.0	0.6
85-gal Drum Dir Ld w/ Liner	0.3	0.0	0.3
Box - Steel	91.5	0.0	91.5
SLB2 (5' x 5' x 8) Dir Ld	39.8	0.0	39.8
SWB Dir Ld w/o Liner	45.0	0.0	45.0
Current Form Total	178.9	0.0	178.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SLB2 (5' x 5' x 8) Dir Ld	34.0	0.0	34.0
SWB Dir Ld w/o Liner	139.9	0.0	139.9
SWB w/ 4 - 55-gal Drums w/ Liners	3.8	0.0	3.8
SWB w/ 4 - 55-gal Drums w/o Liners	1.9	0.0	1.9
Final Form Total	179.5	0.0	179.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	59.40
Aluminum-based Metal/Alloys	0.79
Other Metal/Alloys	4.99
Other Inorganic Materials	20.74
Cellulosics	20.58
Rubber	13.15
Plastics	36.45
Cement	0.00
Solidified Inorganic Material	0.04
Solidified Organic Material	0.00
Soils	0.73
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.34
Packaging Material, Rubber	0.19
Packaging Material, Steel	167.01
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.28E-01
Am-243	2.66E-07
Cm-244	3.13E-06
Cs-137	8.98E-06
Np-237	2.39E-05
Pu-238	1.34E+01
Pu-239	2.79E-01
Pu-240	4.27E-02
Pu-241	1.75E-01
Pu-242	2.48E-05
Sr-90	8.46E-06
Th-229	1.70E-05
Th-230	1.48E-06
Th-232	6.74E-04
U-233	4.97E-03
U-234	4.95E-03
U-235	1.59E-06
U-236	4.94E-08
U-238	2.86E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D030, D032, D034, D037, D043, F002, F004, F005

TRUCON Code(s)

125/225, 154

Waste Stream Description

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-MD-HOM-C**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU Solids (S3000)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
55-gal Drum Dir Ld w/o Liner	0.4	0.0	0.4
Current Form Total	0.6	0.0	0.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.33
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.33
Rubber	0.33
Plastics	1.73
Cement	0.00
Solidified Inorganic Material	63.49
Solidified Organic Material	0.33
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.03E-04
Np-237	1.31E-09
Pu-238	1.67E-01
Pu-242	9.94E-10
Th-229	5.30E-18
Th-230	1.45E-10
U-233	2.26E-14
U-234	3.90E-06
U-238	6.21E-19

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F002, F003, F004, F005

TRUCON Code(s)

111/211

Waste Stream Description

Particulate material with a sand-like consistency from cleanout of a sump and drain lines in R Building

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-MD-PAD1**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH TRU Heterogeneous debris from the Mound Plant					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	64.1	0.0	64.1
83-gal Drum	19.5	0.0	19.5
85-gal Drum Dir Ld w/ Liner	0.3	0.0	0.3
Box - Plywood	60.9	0.0	60.9
SLB2 (5' x 5' x 8) Dir Ld	159.1	0.0	159.1
SWB Dir Ld w/o Liner	9.0	0.0	9.0
Current Form Total	313.0	0.0	313.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	31.6	0.0	31.6
SLB2 (5' x 5' x 8) Dir Ld	135.8	0.0	135.8
SWB Dir Ld w/o Liner	232.5	0.0	232.5
SWB w/ 4 - 55-gal Drums w/ Liners	73.7	0.0	73.7
Final Form Total	473.6	0.0	473.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	51.57
Aluminum-based Metal/Alloys	0.03
Other Metal/Alloys	0.40
Other Inorganic Materials	7.06
Cellulosics	3.12
Rubber	2.45
Plastics	5.70
Cement	0.00
Solidified Inorganic Material	0.30
Solidified Organic Material	0.41
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	5.01
Packaging Material, Rubber	0.24
Packaging Material, Steel	178.71
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	6.02E-02
Am-243	1.77E-07
Cm-244	3.53E-05
Cs-137	1.52E-04
Np-237	5.48E-06
Pu-238	1.90E+01
Pu-239	2.76E-02
Pu-240	1.71E-02
Pu-241	6.66E-02
Pu-242	5.56E-05
Sr-90	1.43E-04
Th-229	1.52E-12
Th-230	2.21E-06
Th-232	2.00E-17
U-233	8.85E-10
U-234	7.20E-03
U-235	8.12E-08
U-236	2.02E-08
U-238	7.31E-08

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D030, D032, D034, D037, D043, F002, F004, F005

TRUCON Code(s)

125/225, 154

Waste Stream Description

This CH TRU waste stream consists of debris shipped to the SRS from the Mound Plant in 1971 and 1972.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-MD-SOIL**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU Soil / Gravel (S4000)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
55-gal Drum Dir Ld w/o Liner	2.5	0.0	2.5
Box - Steel	14.3	0.0	14.3
SWB Dir Ld w/o Liner	5.4	0.0	5.4
Current Form Total	22.7	0.0	22.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/o Liner	20.8	0.0	20.8
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
SWB w/ 4 - 55-gal Drums w/o Liners	5.7	0.0	5.7
Final Form Total	28.4	0.0	28.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.08
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	54.07
Cellulosics	0.28
Rubber	0.10
Plastics	4.06
Cement	0.00
Solidified Inorganic Material	16.60
Solidified Organic Material	0.00
Soils	646.13
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.09
Packaging Material, Rubber	0.26
Packaging Material, Steel	168.82
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	6.18E-03
Cs-137	1.77E-06
Np-237	8.50E-07
Pu-238	4.00E-01
Pu-239	1.03E-02
Pu-240	1.49E-03
Pu-241	1.90E-02
Pu-242	1.98E-06
Sr-90	1.77E-06
Th-229	1.62E-16
Th-230	6.30E-10
Th-232	1.09E-21
U-233	3.70E-12
U-234	6.91E-05
U-235	1.02E-11
U-236	4.42E-11
U-238	3.07E-16

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 absorbent and some commingled debris.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-NIST-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	DOE Owned Plutonium & Uranium waste items.					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/o Liner	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	11.75
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	1.47
Cement	16.15
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.44
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.49E+00
Np-237	1.99E-05
Pu-238	3.85E+00
Pu-239	1.36E+00
Pu-240	3.22E-01
Pu-241	6.20E+00
Pu-242	5.76E-05
Th-229	4.03E-13
Th-230	5.56E-08
Th-232	3.70E-14
U-233	7.69E-10
U-234	4.38E-04
U-235	3.34E-06
U-236	4.18E-05
U-238	1.32E-07

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This material consist of a combination of unirradiated PuO/Uo fuel pellets, Pacemaker source and solidified Pu solutions

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-RH-221H.01**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	RH TRU Heterogeneous debris from the HB-Line					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.6	0.0	3.6
Box - SRS Poly Box	0.2	0.0	0.2
Cask - Steel	5.7	0.0	5.7
Current Form Total	9.5	0.0	9.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	3.7	0.0	3.7
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	4.4	0.0	4.4
Final Form Total	8.1	0.0	8.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	62.52
Aluminum-based Metal/Alloys	3.61
Other Metal/Alloys	4.70
Other Inorganic Materials	25.30
Cellulosics	21.32
Rubber	53.48
Plastics	189.00
Cement	0.00
Solidified Inorganic Material	1.08
Solidified Organic Material	0.36
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	25.77
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.66E-02
Np-237	2.53E-01
Pu-238	1.33E+02
Pu-239	1.24E-01
Pu-240	6.39E-02
Pu-241	1.23E+00
Pu-242	7.38E-05
Th-229	2.13E-08
Th-230	1.20E-06
Th-232	1.82E-15
U-233	2.30E-05
U-234	1.04E-02
U-235	6.30E-06
U-236	1.78E-06
U-238	5.52E-09

Haz. Waste No(s).

D006, D008, D009, D019, D022, D029, D039, D040, D043, F001, F002, F003, F005, U133

TRUCON Code(s)

321, 322, 325

Waste Stream Description

This waste stream is defense related, remote handled TRU waste and is composed of metal equipment and debris

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-RH-221H.02**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Composite Filter Waste			**Inventory Date**	12/31/2011
Stream Name	RH TRU HEPA Filter from the HB-Line					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Box - SRS Poly Box	4.2	0.0	4.2
Current Form Total	4.2	0.0	4.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	4.4	0.0	4.4
Final Form Total	4.4	0.0	4.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.48
Aluminum-based Metal/Alloys	2.68
Other Metal/Alloys	0.00
Other Inorganic Materials	1.14
Cellulosics	0.75
Rubber	0.01
Plastics	1.55
Cement	0.00
Solidified Inorganic Material	0.01
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.31E-02
Cs-137	6.45E-01
Np-237	5.74E-04
Pu-238	6.22E+01
Pu-239	1.34E-01
Pu-240	9.22E-02
Pu-241	6.42E-01
Pu-242	3.41E-05
Th-229	1.77E-06
Th-230	5.40E-07
Th-232	5.58E-14
U-233	8.39E-04
U-234	4.69E-03
U-235	2.71E-06
U-236	4.71E-05
U-238	2.36E-06

Haz. Waste No(s).

D006, D007, D008, D009, D011, D019, D022, D029, D035, D039, D040, D043

TRUCON Code(s)

322, 325

Waste Stream Description

This waste stream is defense related, remote handled TRU waste and is composed of 24"X24"X12" HEPA Filter

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-RH-235F.01**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	RH TRU Heterogeneous debris from the 235F facility.					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.5	0.0	1.5
Box - SRS Poly Box	0.2	0.0	0.2
Current Form Total	1.7	0.0	1.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	46.05
Aluminum-based Metal/Alloys	2.51
Other Metal/Alloys	1.23
Other Inorganic Materials	13.38
Cellulosics	7.83
Rubber	47.03
Plastics	59.20
Cement	0.00
Solidified Inorganic Material	0.55
Solidified Organic Material	0.11
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.45E+02
Np-237	2.36E-02
Pu-238	2.02E+02
Pu-239	1.92E+00
Pu-240	5.06E-01
Pu-241	9.84E+02
Pu-242	1.85E-04
Th-229	3.42E-09
Th-230	2.38E-06
Th-232	2.90E-16
U-233	2.80E-06
U-234	1.79E-02
U-235	5.30E-08
U-236	4.20E-07
U-238	8.03E-13

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D035, F002

TRUCON Code(s)

322, 325

Waste Stream Description

This waste stream is defense related, remote handled TRU waste and is composed of metal equipment and debris

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-RH-772F.01**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Analytical Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	RH TRU Heterogeneous debris from the 772F and 772-1F laboratories.					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	58.17
Aluminum-based Metal/Alloys	4.27
Other Metal/Alloys	11.74
Other Inorganic Materials	117.40
Cellulosics	29.35
Rubber	21.88
Plastics	290.84
Cement	0.00
Solidified Inorganic Material	0.53
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.15E-03
Cs-137	9.63E-02
Np-237	5.30E-07
Pu-238	4.57E-03
Pu-239	3.58E-03
Pu-240	1.09E-03
Pu-241	7.55E-03
Pu-242	1.78E-07
Sr-90	9.50E-02
Th-229	8.09E-15
Th-230	2.84E-11
Th-232	9.70E-18
U-233	2.05E-11
U-234	4.03E-07
U-235	2.46E-09
U-236	2.20E-08
U-238	2.49E-16

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D028, D029, F002, F003, F005

TRUCON Code(s)

322, 325

Waste Stream Description

This waste stream is defense related remote 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. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-RH-773A.01**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Analytical Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	RH TRU Heterogeneous debris from the SRNL					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	7.1	0.0	7.1
55-gal Drum Dir Ld w/o Liner	0.0	10.9	10.9
Box - Concrete	14.2	0.0	14.2
Box - Fiberglass	0.9	0.0	0.9
Cask - SRS CMISC	3.8	0.0	3.8
Current Form Total	26.0	10.9	36.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	7.5	0.0	7.5
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	0.0	11.2	11.2
Final Form Total	7.5	11.2	18.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	674.16
Aluminum-based Metal/Alloys	7.40
Other Metal/Alloys	45.15
Other Inorganic Materials	443.83
Cellulosics	241.56
Rubber	365.78
Plastics	757.57
Cement	0.00
Solidified Inorganic Material	15.30
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	23.49
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.32E-01
Am-243	1.82E-01
Cm-244	1.67E+01
Cs-137	3.50E+00
Np-237	1.30E-05
Pu-238	9.80E+00
Pu-239	2.58E-01
Pu-240	1.41E-01
Pu-241	2.20E+00
Pu-242	7.23E-05
Pu-244	5.51E-14
Sr-90	2.58E+00
Th-229	4.84E-07
Th-230	4.23E-08
Th-232	3.50E-14
U-233	7.86E-04
U-234	7.55E-04
U-235	8.08E-06
U-236	1.01E-04
U-238	3.22E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D043, F002, F004, F005

TRUCON Code(s)

321, 322, 325

Waste Stream Description

This waste stream is defense related remote 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. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-RH-FBL.01**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	RH TRU Heterogeneous debris from the FB-Line					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.9	0.0	1.9
55-gal Drum Dir Ld w/o Liner	1.1	0.0	1.1
Cask - Concrete/Carbon Steel Liner	1.6	0.0	1.6
Current Form Total	4.5	0.0	4.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	1.9	0.0	1.9
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	3.1	0.0	3.1
Final Form Total	5.0	0.0	5.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	45.99
Aluminum-based Metal/Alloys	0.53
Other Metal/Alloys	1.18
Other Inorganic Materials	216.35
Cellulosics	10.16
Rubber	15.47
Plastics	60.45
Cement	0.00
Solidified Inorganic Material	0.14
Solidified Organic Material	0.76
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	22.57
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.41E-01
Cs-137	4.18E+00
Np-237	4.64E-04
Pu-238	1.35E+00
Pu-239	2.53E+00
Pu-240	5.96E-01
Pu-241	1.95E+01
Pu-242	1.00E-04
Sr-90	3.94E-01
Th-229	3.14E-12
Th-230	3.35E-08
Th-232	5.44E-15
U-233	1.19E-08
U-234	6.18E-04
U-235	2.09E-05
U-236	1.84E-05
U-238	6.38E-04

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D018, D019, D022, D029, D039, D040, D043, F002, F005, U002, U151

TRUCON Code(s)

321

Waste Stream Description

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, rags, and other job control waste and silver coated ceramics (burl saddles)

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-RH-MNDPAD1.01**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	RH Debris from Mound Laboratories					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	25.62
Aluminum-based Metal/Alloys	0.02
Other Metal/Alloys	0.20
Other Inorganic Materials	3.51
Cellulosics	1.55
Rubber	1.22
Plastics	2.83
Cement	0.00
Solidified Inorganic Material	0.15
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.70
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.04E-02
Np-237	1.75E-09
Pu-238	3.18E+02
Pu-239	2.22E-01
Pu-240	1.21E-01
Pu-241	6.34E+00
Pu-242	1.45E-04
Th-229	5.78E-20
Th-230	4.15E-09
Th-232	8.87E-20
U-233	2.58E-15
U-234	9.02E-04
U-235	2.19E-10
U-236	3.60E-09
U-238	2.24E-14

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)

322, 325

Waste Stream Description

Process equipment and exchange resin

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-RH-SDD.01**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Remote Handled PuBe Sources					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/o Liner	5.4	0.0	5.4
Current Form Total	5.4	0.0	5.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 30-gal w/o Liner	0.3	0.0	0.3
Final Form Total	0.3	0.0	0.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	5604.15
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	1401.04
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.02
Packaging Material, Rubber	1.04
Packaging Material, Steel	1616.52
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.69E+01
Np-237	2.14E-05
Pu-238	2.72E+02
Pu-239	4.19E+00
Pu-240	2.53E+00
Pu-241	1.20E+02
Pu-242	4.22E-03
Th-229	2.11E-14
Th-230	5.76E-08
Th-232	2.96E-17
U-233	1.80E-10
U-234	3.12E-03
U-235	1.65E-08
U-236	3.00E-07
U-238	2.62E-12

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of three PuBe sources individually packaged in SWB with polyethylene shielding.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-RH-SWD.01**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Remote Handled (RH) Mixed TRU Debris (S5000)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.1	0.0	1.1
Current Form Total	1.1	0.0	1.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	1.2	0.0	1.2
Final Form Total	1.2	0.0	1.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	1797.12
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	141.49
Cement	0.00
Solidified Inorganic Material	29.52
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.25E-01
Am-243	7.39E-02
Cm-244	4.00E+00
Cs-137	1.49E-02
Np-237	5.37E-04
Pu-238	2.69E-01
Pu-239	3.45E-01
Pu-240	1.16E-01
Pu-241	1.75E+00
Pu-242	3.76E-05
Pu-244	2.86E-15
Sr-90	1.03E-02
Th-229	2.61E-11
Th-230	9.73E-10
Th-232	2.06E-17
U-233	3.71E-08
U-234	1.30E-05
U-235	5.44E-09
U-236	5.30E-08
U-238	9.34E-14

No Hazardous Waste Numbers Provided

TRUCON Code(s)

322, 325

Waste Stream Description

RH Mixed TRU waste resulting from solvent tank emptying and closure in the E-Area of SRS.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-SDD-HET-A**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH TRU - Heterogeneous debris from the D&D of the 211-F-Area					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2.1	0.0	2.1
SWB Dir Ld w/o Liner	5.4	0.0	5.4
Current Form Total	7.5	0.0	7.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.5	0.0	1.5
SWB Dir Ld w/o Liner	5.7	0.0	5.7
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	9.0	0.0	9.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	42.47
Aluminum-based Metal/Alloys	0.41
Other Metal/Alloys	0.03
Other Inorganic Materials	0.40
Cellulosics	1.88
Rubber	0.00
Plastics	18.69
Cement	0.89
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	9.40
Packaging Material, Rubber	0.31
Packaging Material, Steel	161.87
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.70E-03
Am-243	4.43E-07
Cm-244	3.80E-05
Cs-137	1.79E-05
Np-237	6.25E-06
Pu-238	4.94E-01
Pu-239	2.82E-02
Pu-240	3.95E-03
Pu-241	5.98E-02
Pu-242	3.49E-06
Sr-90	4.35E-03
Th-229	1.94E-10
Th-230	3.12E-10
Th-232	1.22E-17
U-233	4.41E-07
U-234	1.03E-05
U-235	6.73E-09
U-236	4.96E-08
U-238	1.41E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011

No TRUCON Codes Provided

Waste Stream Description

This waste stream is defense related, contact handled TRU waste and is composed of metal equipment, tools and debris and small amounts of Portland cement

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-SDD-HET-B**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Contact Handled PuBe Sources					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
110-gal Drum	0.4	0.0	0.4
55-gal Drum Dir Ld w/ Liner	1.1	0.0	1.1
55-gal Drum Dir Ld w/o Liner	0.4	0.0	0.4
Current Form Total	1.9	0.0	1.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/o Liner	1.9	0.0	1.9
SWB w/ 4 - 55-gal Drums w/ Liners	3.8	0.0	3.8
SWB w/ 4 - 55-gal Drums w/o Liners	1.9	0.0	1.9
Final Form Total	7.6	0.0	7.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	218.25
Aluminum-based Metal/Alloys	6.31
Other Metal/Alloys	0.00
Other Inorganic Materials	2.89
Cellulosics	11.04
Rubber	0.00
Plastics	93.25
Cement	2.89
Solidified Inorganic Material	1.17
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.15
Packaging Material, Rubber	0.38
Packaging Material, Steel	196.69
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.42E-01
Np-237	1.77E-06
Pu-238	1.24E+01
Pu-239	3.39E-01
Pu-240	8.31E-02
Pu-241	1.10E+00
Pu-242	2.03E-05
Sr-90	2.23E-09
Th-229	6.83E-14
Th-230	1.25E-07
Th-232	4.11E-17
U-233	9.33E-11
U-234	1.01E-03
U-235	8.68E-09
U-236	6.40E-08
U-238	1.20E-10

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists PuBe and Americium sources from various facilities at the SRS

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-SDD-HOM-A**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2011
Stream Name	Organic Sludge from D&D of the SRS F-Area 800 Series Underground Tanks					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
55-gal Drum Dir Ld w/o Liner	5.0	0.0	5.0
Current Form Total	5.5	0.0	5.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	4.4	0.0	4.4
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
SWB w/ 4 - 55-gal Drums w/o Liners	1.9	0.0	1.9
Final Form Total	8.1	0.0	8.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	5.24
Cement	368.84
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	3.78
Packaging Material, Rubber	0.51
Packaging Material, Steel	168.04
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.97E-02
Am-243	9.51E-05
Np-237	1.35E-02
Pu-238	1.57E+00
Pu-239	1.45E-01
Pu-240	2.76E-02
Pu-241	3.26E-01
Pu-242	6.30E-02
Th-229	2.71E-05
Th-230	6.39E-06
Th-232	1.02E-13
U-233	6.16E-02
U-234	1.39E-01
U-235	1.10E-04
U-236	4.13E-04
U-238	6.69E-03

Haz. Waste No(s).

D004, D005, D007, D008, D009, D011

TRUCON Code(s)

112/212

Waste Stream Description

Absorbed organic sludge packaged in 55-gallon drums

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-SDD-HOM-B**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Sludge from D&D of the SRS F-Area 800 Series Underground Tanks					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	5.0	0.0	5.0
55-gal Drum Dir Ld w/o Liner	10.3	0.0	10.3
SWB Dir Ld w/o Liner	9.0	0.0	9.0
Current Form Total	24.3	0.0	24.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	4.4	0.0	4.4
55-gal Drum Dir Ld w/o Liner	10.2	0.0	10.2
SWB Dir Ld w/o Liner	9.5	0.0	9.5
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	25.9	0.0	25.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	37.27
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	2.70
Cellulosics	14.22
Rubber	0.00
Plastics	29.18
Cement	162.06
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	7.44
Packaging Material, Rubber	0.42
Packaging Material, Steel	144.90
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.42E-01
Am-243	5.50E-05
Cm-244	2.47E-03
Cs-137	4.04E-04
Np-237	5.53E-04
Pu-238	4.37E+01
Pu-239	2.50E+00
Pu-240	3.49E-01
Pu-241	5.16E+00
Pu-242	1.21E-03
Sr-90	1.74E-04
Th-229	2.59E-12
Th-230	2.80E-08
Th-232	1.11E-15
U-233	1.18E-08
U-234	9.23E-04
U-235	2.42E-06
U-236	4.54E-06
U-238	7.12E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011

TRUCON Code(s)

127/227

Waste Stream Description

Absorbed sludge packaged in 55-gallon drums

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-SWMF-HET-A**

Appendix A
Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU Debris (S5000)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.5	0.0	1.5
55-gal Drum Dir Ld w/o Liner	13.2	56.9	70.1
85-gal Drum Dir Ld w/o Liner	0.3	0.0	0.3
SLB2 (5' x 5' x 8) Dir Ld	6.6	0.0	6.6
SWB Dir Ld w/o Liner	68.4	0.0	68.4
Current Form Total	90.1	56.9	147.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	13.1	56.4	69.5
SLB2 (5' x 5' x 8) Dir Ld	5.7	0.0	5.7
SWB Dir Ld w/o Liner	73.7	0.0	73.7
SWB w/ 4 - 55-gal Drums w/ Liners	3.8	0.0	3.8
Final Form Total	96.3	56.4	152.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	68.64
Aluminum-based Metal/Alloys	1.36
Other Metal/Alloys	0.10
Other Inorganic Materials	2.59
Cellulosics	7.04
Rubber	6.03
Plastics	22.52
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.01
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.40
Packaging Material, Rubber	0.37
Packaging Material, Steel	146.85
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	9.02E-02
Am-243	8.67E-06
Cm-244	2.60E-03
Cs-137	6.91E-05
Np-237	9.26E-05
Pu-238	8.42E+00
Pu-239	2.04E-01
Pu-240	5.37E-02
Pu-241	7.98E-01
Pu-242	1.56E-04
Sr-90	6.88E-05
Th-229	2.57E-09
Th-230	2.85E-08
Th-232	2.84E-09
U-233	9.74E-06
U-234	1.07E-03
U-235	2.04E-07
U-236	4.77E-09
U-238	8.28E-06

Haz. Waste No(s).

D008, F001, F002, F004, F005, F007, F009, U133, U151

TRUCON Code(s)

125/225, 154

Waste Stream Description

CH Mixed TRU waste resulting from remediation and re-packaging of Mixed "defense related" TRU waste.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-SWMF-HET-B**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Spill Clean-ups/Emergency Response Actions	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Spill cleanup debris.					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.7	0.0	1.7
Current Form Total	1.7	0.0	1.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	3.8	0.0	3.8
Final Form Total	3.8	0.0	3.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	71.69
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	17.83
Cellulosics	14.26
Rubber	0.00
Plastics	13.54
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.85E-01
Am-243	2.34E-01
Cm-244	6.87E+00
Np-237	1.95E-06
Pu-238	2.95E-01
Pu-239	6.91E-04
Pu-240	1.26E-01
Pu-241	3.63E-02
Pu-242	7.44E-05
Pu-244	2.10E-14
Th-229	1.28E-13
Th-230	4.64E-09
Th-232	7.52E-17
U-233	1.36E-10
U-234	3.03E-05
U-235	1.84E-11
U-236	1.02E-07
U-238	3.69E-13

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D043, F002, F004, F005, U133

TRUCON Code(s)

125/225, 154

Waste Stream Description

Solid Waste Management Facility debris resulting from spill cleanup activities

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-SWMF-SOIL**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Spill Clean-ups/Emergency Response Actions	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU Waste Soil & Gravel					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.2	0.0	3.2
Current Form Total	3.2	0.0	3.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	7.6	0.0	7.6
Final Form Total	7.6	0.0	7.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.49
Rubber	0.00
Plastics	0.91
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	324.07
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.12E-01
Am-243	6.48E-01
Cm-244	1.90E+01
Np-237	5.40E-06
Pu-238	8.18E-01
Pu-239	1.91E-03
Pu-240	3.49E-01
Pu-241	1.00E-01
Pu-242	2.06E-04
Pu-244	5.83E-14
Th-229	3.54E-13
Th-230	1.29E-08
Th-232	2.08E-16
U-233	3.77E-10
U-234	8.39E-05
U-235	5.10E-11
U-236	2.83E-07
U-238	1.02E-12

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D043, F002, F004, F005, U133

TRUCON Code(s)

111/211

Waste Stream Description

Burial Ground Soil and Gravel from spill cleanup / remediation activities.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W026-221F-HEPA**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Composite Filter Waste			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU HEPA Filters (S5000)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

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/o Liner	16.2	0.0	16.2
Current Form Total	16.4	0.0	16.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/o Liner	17.0	0.0	17.0
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	18.9	0.0	18.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	23.03
Aluminum-based Metal/Alloys	0.22
Other Metal/Alloys	0.00
Other Inorganic Materials	1.43
Cellulosics	9.42
Rubber	0.00
Plastics	16.49
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.63
Packaging Material, Rubber	0.22
Packaging Material, Steel	159.21
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.65E-01
Am-243	3.63E-14
Cs-137	8.92E-08
Np-237	3.08E-06
Pu-238	5.34E-02
Pu-239	8.45E-01
Pu-240	2.21E-01
Pu-241	9.87E-01
Pu-242	2.56E-05
Sr-90	8.64E-08
Th-229	4.03E-07
Th-230	5.88E-09
Th-232	7.14E-17
U-233	2.19E-04
U-234	3.21E-05
U-235	6.39E-07
U-236	1.38E-07
U-238	4.74E-08

Haz. Waste No(s).

D005, D007, D009, D011, D019, D022, D028, D029, D043, F002, F005

TRUCON Code(s)

119/219, 154

Waste Stream Description

HEPA Filters in Filtered Polyethylene Boxes

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W026-221F-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU/Thirds Heterogeneous debris from 221F					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	9.7	0.0	9.7
55-gal Drum Dir Ld w/o Liner	0.6	0.0	0.6
85-gal Drum Dir Ld w/o Liner	0.3	0.0	0.3
Box - SRS B-25 OP	18.0	0.0	18.0
SLB2 (5' x 5' x 8) Dir Ld	358.0	0.0	358.0
SWB Dir Ld w/o Liner	91.8	0.0	91.8
Current Form Total	478.5	0.0	478.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	9.6	0.0	9.6
55-gal Drum Dir Ld w/o Liner	0.6	0.0	0.6
SLB2 (5' x 5' x 8) Dir Ld	305.6	0.0	305.6
SWB Dir Ld w/o Liner	117.2	0.0	117.2
Final Form Total	433.0	0.0	433.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	67.08
Aluminum-based Metal/Alloys	0.96
Other Metal/Alloys	0.47
Other Inorganic Materials	13.02
Cellulosics	23.64
Rubber	15.00
Plastics	54.68
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.05
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.82
Packaging Material, Rubber	0.17
Packaging Material, Steel	196.74
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.58E-01
Am-243	1.33E-07
Cm-244	1.23E-04
Cs-137	2.47E-06
Np-237	1.08E-05
Pu-238	8.04E-01
Pu-239	3.19E+00
Pu-240	8.83E-01
Pu-241	1.05E+01
Pu-242	5.59E-04
Sr-90	2.49E-06
Th-229	8.94E-14
Th-230	2.38E-08
Th-232	1.04E-07
U-233	2.98E-10
U-234	3.78E-04
U-235	4.84E-06
U-236	1.83E-07
U-238	3.23E-05

Haz. Waste No(s).

D006, D007, D008, D009, D022, D028, D029, F001, F002, F003, F005

TRUCON Code(s)

125/225, 154

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. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W026-221F-HET-A**

Appendix A
Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU/Thirds Heterogeneous debris from 221F					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
55-gal Drum Dir Ld w/o Liner	0.8	0.0	0.8
Current Form Total	1.1	0.0	1.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
SWB w/ 4 - 55-gal Drums w/o Liners	1.9	0.0	1.9
Final Form Total	3.8	0.0	3.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	1.93
Other Inorganic Materials	130.78
Cellulosics	0.17
Rubber	0.00
Plastics	7.52
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.15
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.93E-01
Cm-244	6.26E-03
Cs-137	1.91E-01
Np-237	2.91E-06
Pu-238	3.47E-02
Pu-239	6.41E-01
Pu-240	1.61E-01
Pu-241	3.71E+00
Pu-242	2.80E-05
Sr-90	5.31E-02
Th-229	5.15E-09
Th-230	1.31E-08
Th-232	3.24E-16
U-233	8.36E-06
U-234	2.04E-04
U-235	6.46E-06
U-236	9.56E-07
U-238	2.46E-06

Haz. Waste No(s).

D006, D007, D008, D009, D011, D019, D022, D028, D029, F002, F005

TRUCON Code(s)

125/225, 154

Waste Stream Description

200 Areas (F Separations Facilities). This waste consists of silver impregnated ceramic saddles removed from the F-Canyon dissolver off-gas system.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W026-221F-HOM**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU Solids (S3000)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	10.1	0.0	10.1
Current Form Total	10.1	0.0	10.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	10.0	0.0	10.0
Final Form Total	10.0	0.0	10.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	5.36
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	25.47
Rubber	8.04
Plastics	80.44
Cement	0.00
Solidified Inorganic Material	329.80
Solidified Organic Material	891.53
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.76E-01
Am-243	2.20E-04
Cs-137	2.30E-03
Np-237	1.78E-05
Pu-238	5.32E-01
Pu-239	1.53E+00
Pu-240	3.87E-01
Pu-241	4.22E+00
Pu-242	5.81E-03
Sr-90	1.17E-03
Th-229	1.42E-12
Th-230	1.96E-08
Th-232	1.25E-16
U-233	1.55E-09
U-234	1.18E-04
U-235	1.32E-05
U-236	2.41E-07
U-238	4.46E-04

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D019, D022, D028, D029, D043, F002, F004, F005, U151

TRUCON Code(s)

127/227

Waste Stream Description

Absorbed oil, neutralized acids / bases and water

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W026-772F-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU/Thirds Heterogeneous debris from 772F					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	13.2	54.6	67.8
55-gal Drum Dir Ld w/o Liner	0.4	0.0	0.4
Box - SRS B-25 OP	7.2	0.0	7.2
SLB2 (5' x 5' x 8) Dir Ld	26.5	0.0	26.5
SWB Dir Ld w/o Liner	79.2	25.2	104.4
Current Form Total	126.6	79.8	206.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	13.1	54.1	67.2
SLB2 (5' x 5' x 8) Dir Ld	22.6	0.0	22.6
SWB Dir Ld w/o Liner	90.7	26.5	117.2
SWB w/ 4 - 55-gal Drums w/o Liners	1.9	0.0	1.9
Final Form Total	128.4	80.5	208.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	9.38
Aluminum-based Metal/Alloys	0.71
Other Metal/Alloys	0.89
Other Inorganic Materials	19.71
Cellulosics	5.47
Rubber	4.32
Plastics	45.70
Cement	0.00
Solidified Inorganic Material	0.09
Solidified Organic Material	0.01
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	11.92
Packaging Material, Rubber	0.31
Packaging Material, Steel	153.40
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.60E-01
Am-243	2.24E-06
Cm-244	2.51E-03
Cs-137	8.19E-04
Np-237	2.54E-04
Pu-238	9.10E+00
Pu-239	4.22E-01
Pu-240	1.05E-01
Pu-241	1.61E+00
Pu-242	4.70E-05
Sr-90	8.05E-04
Th-229	5.66E-08
Th-230	1.09E-07
Th-232	5.58E-07
U-233	8.29E-05
U-234	1.79E-03
U-235	1.67E-06
U-236	2.18E-08
U-238	1.13E-06

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

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. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W026-DWPF-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Analytical Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH TRU - Heterogeneous debris from the DWPF laboratory					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.4	0.0	0.4
Current Form Total	0.4	0.0	0.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/o Liners	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.78
Aluminum-based Metal/Alloys	0.39
Other Metal/Alloys	0.00
Other Inorganic Materials	1.55
Cellulosics	3.75
Rubber	0.00
Plastics	6.46
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.93E-04
Am-243	3.09E-06
Cm-244	2.11E-04
Cs-137	8.21E-03
Np-237	5.16E-07
Pu-238	5.54E-03
Pu-239	2.82E-04
Pu-240	1.03E-04
Pu-241	1.29E-03
Pu-242	2.15E-07
Sr-90	2.16E-01
Th-229	1.13E-09
Th-230	7.29E-11
Th-232	1.05E-17
U-233	2.57E-06
U-234	1.62E-06
U-235	1.62E-07
U-236	4.26E-08
U-238	5.15E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225, 154

Waste Stream Description

CH TRU waste consisting of contaminated laboratory debris

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W026-MFFF-1**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	UNKNOWN					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.0	2999.0	2999.0
Current Form Total	0.0	2999.0	2999.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.0	2970.4	2970.4
Final Form Total	0.0	2970.4	2970.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	19.32
Aluminum-based Metal/Alloys	32.22
Other Metal/Alloys	18.31
Other Inorganic Materials	29.76
Cellulosics	26.60
Rubber	31.91
Plastics	100.66
Cement	0.00
Solidified Inorganic Material	4.44
Solidified Organic Material	3.64
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W026-WSB-2**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	N/A					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.0	594.7	594.7
Current Form Total	0.0	594.7	594.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.0	589.1	589.1
Final Form Total	0.0	589.1	589.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	3.41
Aluminum-based Metal/Alloys	0.72
Other Metal/Alloys	12.89
Other Inorganic Materials	8.01
Cellulosics	31.41
Rubber	58.40
Plastics	139.38
Cement	0.00
Solidified Inorganic Material	7.89
Solidified Organic Material	6.45
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
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-W027-221F-HET-A**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU/F listed solvents - Heterogeneous debris from 221F					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.4	0.0	3.4
Box - SRS Poly Box	0.7	0.0	0.7
SLB2 (5' x 5' x 8) Dir Ld	46.4	0.0	46.4
SWB Dir Ld w/o Liner	37.8	0.0	37.8
Current Form Total	88.2	0.0	88.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SLB2 (5' x 5' x 8) Dir Ld	39.6	0.0	39.6
SWB Dir Ld w/o Liner	41.6	0.0	41.6
SWB w/ 4 - 55-gal Drums w/ Liners	7.6	0.0	7.6
Final Form Total	88.8	0.0	88.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	20.94
Aluminum-based Metal/Alloys	0.81
Other Metal/Alloys	0.17
Other Inorganic Materials	9.76
Cellulosics	11.55
Rubber	7.08
Plastics	67.70
Cement	0.00
Solidified Inorganic Material	0.08
Solidified Organic Material	0.02
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.39
Packaging Material, Rubber	0.19
Packaging Material, Steel	186.07
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.30E-01
Am-243	3.36E-08
Cm-244	2.00E-06
Cs-137	3.28E-07
Np-237	9.84E-06
Pu-238	1.89E-01
Pu-239	1.90E+00
Pu-240	5.84E-01
Pu-241	3.67E+00
Pu-242	8.81E-05
Sr-90	2.95E-07
Th-229	2.41E-07
Th-230	2.80E-08
Th-232	9.47E-08
U-233	1.10E-04
U-234	1.29E-04
U-235	1.50E-07
U-236	4.33E-07
U-238	1.04E-06

Haz. Waste No(s).

D006, D008, D009, F001, F002, F005

TRUCON Code(s)

125/225, 154

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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-221H-HEPA**

Appendix A
Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Composite Filter Waste			**Inventory Date**	12/31/2011
Stream Name	CH TRU HEPA filters					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.3	0.0	1.3
55-gal Drum Dir Ld w/o Liner	0.0	4.2	4.2
Box - Fiberglass	7.7	0.0	7.7
Box - SRS Poly Box	4.3	0.0	4.3
Box - Steel	5.1	0.0	5.1
SWB Dir Ld w/o Liner	64.8	10.8	75.6
Current Form Total	83.1	15.0	98.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.0	4.2	4.2
SWB Dir Ld w/o Liner	86.9	11.3	98.3
SWB w/ 4 - 55-gal Drums w/ Liners	3.8	0.0	3.8
Final Form Total	90.7	15.5	106.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	28.97
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	5.14
Cellulosics	9.81
Rubber	0.06
Plastics	17.79
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.58
Packaging Material, Rubber	0.22
Packaging Material, Steel	154.60
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	9.03E-03
Am-243	1.46E-07
Cs-137	1.78E-03
Np-237	4.25E-05
Pu-238	3.55E+00
Pu-239	4.06E-02
Pu-240	1.01E-02
Pu-241	1.39E-01
Pu-242	1.64E-05
Sr-90	1.76E-03
Th-229	1.99E-13
Th-230	2.96E-08
Th-232	1.84E-19
U-233	9.05E-10
U-234	6.70E-04
U-235	7.98E-08
U-236	1.49E-09
U-238	1.27E-14

Haz. Waste No(s).

D006, D007, D008, D009, D011, 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

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-221H-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU/F listed solvents - Heterogeneous debris from 221H					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	33.2	0.0	33.2
55-gal Drum Dir Ld w/o Liner	1.5	0.0	1.5
SWB Dir Ld w/o Liner	12.6	0.0	12.6
Current Form Total	47.3	0.0	47.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	32.0	0.0	32.0
SWB Dir Ld w/o Liner	13.2	0.0	13.2
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
SWB w/ 4 - 55-gal Drums w/o Liners	3.8	0.0	3.8
Final Form Total	50.9	0.0	50.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	23.88
Aluminum-based Metal/Alloys	1.13
Other Metal/Alloys	0.37
Other Inorganic Materials	8.87
Cellulosics	5.63
Rubber	15.70
Plastics	49.46
Cement	0.00
Solidified Inorganic Material	0.13
Solidified Organic Material	0.01
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	23.92
Packaging Material, Rubber	0.46
Packaging Material, Steel	145.60
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.65E-01
Am-243	1.60E-06
Cm-244	2.20E-03
Cs-137	1.24E-05
Np-237	1.40E-03
Pu-238	7.01E+01
Pu-239	2.41E-01
Pu-240	6.72E-02
Pu-241	4.59E+00
Pu-242	1.51E-04
Sr-90	1.23E-05
Th-229	2.12E-07
Th-230	8.84E-07
Th-232	2.19E-06
U-233	3.44E-04
U-234	1.44E-02
U-235	2.23E-06
U-236	1.39E-08
U-238	2.32E-06

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

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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-221H-HET-C**

Appendix A
Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU - Heterogeneous debris from 221H					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	10.1	0.0	10.1
55-gal Drum Dir Ld w/o Liner	33.0	105.8	138.8
SWB Dir Ld w/o Liner	14.4	43.2	57.6
Current Form Total	57.5	149.0	206.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	8.7	0.0	8.7
55-gal Drum Dir Ld w/o Liner	32.0	104.8	136.9
SWB Dir Ld w/o Liner	15.1	45.4	60.5
SWB w/ 4 - 55-gal Drums w/ Liners	3.8	0.0	3.8
SWB w/ 4 - 55-gal Drums w/o Liners	1.9	0.0	1.9
Final Form Total	61.6	150.2	211.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	22.31
Aluminum-based Metal/Alloys	10.05
Other Metal/Alloys	0.61
Other Inorganic Materials	20.05
Cellulosics	2.55
Rubber	13.91
Plastics	58.71
Cement	0.00
Solidified Inorganic Material	3.87
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.82
Packaging Material, Rubber	0.46
Packaging Material, Steel	139.40
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.68E-01
Cs-137	2.58E-05
Np-237	2.72E-03
Pu-238	6.89E-01
Pu-239	9.74E-01
Pu-240	2.41E-01
Pu-241	1.39E+00
Pu-242	5.95E-05
Sr-90	2.55E-05
Th-229	2.51E-11
Th-230	4.82E-08
Th-232	8.61E-18
U-233	8.15E-08
U-234	7.56E-04
U-235	1.58E-05
U-236	4.98E-08
U-238	1.80E-06

Haz. Waste No(s).

D006, D007, D008, D009, D011

TRUCON Code(s)

125/225, 154

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. Small HEPA filters, sludges, resins, absorbed liquids, and large metal equipment are also in these waste streams.

Waste Stream ID: **SR-W027-221H-HOM**

Appendix A
Waste Profile Report

Site	Savannah River Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU Absorbed / Stabilized Liquids					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
55-gal Drum Dir Ld w/o Liner	2.1	0.0	2.1
Current Form Total	2.7	0.0	2.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	1.5	0.0	1.5
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
SWB w/ 4 - 55-gal Drums w/o Liners	1.9	0.0	1.9
Final Form Total	5.2	0.0	5.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	3.36
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	59.42
Cellulosics	2.24
Rubber	2.24
Plastics	25.79
Cement	0.00
Solidified Inorganic Material	17.94
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	5.88
Packaging Material, Rubber	0.48
Packaging Material, Steel	188.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.88E-01
Am-243	6.48E-08
Cs-137	2.90E-03
Np-237	7.79E-05
Pu-238	4.23E-01
Pu-239	4.48E-01
Pu-240	1.22E-01
Pu-241	1.27E+00
Pu-242	4.35E-05
Sr-90	2.88E-03
Th-229	1.10E-09
Th-230	3.11E-08
Th-232	6.99E-16
U-233	3.12E-06
U-234	8.47E-04
U-235	1.62E-05
U-236	3.55E-06
U-238	8.50E-07

Haz. Waste No(s).

D006, D007, D008, D009, D011, D019, D022, D029, D043, F002, F005, U133

TRUCON Code(s)

127/227

Waste Stream Description

CH Mixed TRU Absorbed / Stabilized Liquids

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-235F/221H-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Commingled waste from HBL and 235F.					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
SLB2 (5' x 5' x 8) Dir Ld	33.2	0.0	33.2
SWB Dir Ld w/o Liner	12.6	0.0	12.6
Current Form Total	46.4	0.0	46.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SLB2 (5' x 5' x 8) Dir Ld	28.3	0.0	28.3
SWB Dir Ld w/o Liner	13.2	0.0	13.2
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	43.4	0.0	43.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	174.57
Aluminum-based Metal/Alloys	12.02
Other Metal/Alloys	19.28
Other Inorganic Materials	19.28
Cellulosics	28.79
Rubber	1.81
Plastics	21.42
Cement	0.00
Solidified Inorganic Material	1.39
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.71
Packaging Material, Rubber	0.17
Packaging Material, Steel	196.43
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.37E-04
Np-237	6.98E-05
Pu-238	4.68E-01
Pu-239	3.82E-04
Pu-240	2.08E-04
Pu-241	4.15E-03
Pu-242	2.49E-07
Th-229	5.86E-12
Th-230	2.99E-09
Th-232	6.72E-20
U-233	6.35E-09
U-234	3.01E-05
U-235	7.89E-12
U-236	1.30E-10
U-238	8.10E-16

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D029, D043, F002, F005, U133

TRUCON Code(s)

125/225, 154

Waste Stream Description

This waste will consist of repackaged waste from a large steel box that was originally loaded from two separate SRS generator facilities (i.e. H-B line and 235F)

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-235F-HEPA**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU consisting of HEPA Filters from the 235-F.					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Box - SRS Poly Box	0.2	0.0	0.2
SWB Dir Ld w/o Liner	14.4	0.0	14.4
Current Form Total	15.3	0.0	15.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/o Liner	17.0	0.0	17.0
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	18.9	0.0	18.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	2.63
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.63
Cellulosics	24.07
Rubber	0.00
Plastics	15.51
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.63
Packaging Material, Rubber	0.22
Packaging Material, Steel	159.21
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.06E-02
Am-243	1.09E-13
Cs-137	3.35E-08
Np-237	1.62E-04
Pu-238	5.21E-01
Pu-239	5.93E-03
Pu-240	2.58E-03
Pu-241	1.15E-02
Pu-242	4.53E-06
Sr-90	3.21E-08
Th-229	2.42E-11
Th-230	6.31E-08
Th-232	1.48E-18
U-233	1.97E-08
U-234	2.67E-04
U-235	2.38E-06
U-236	2.14E-09
U-238	1.97E-14

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D035

TRUCON Code(s)

119/219, 154

Waste Stream Description

This waste stream is defense related, contact handled TRU waste and is composed of spent HEPA Filters

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-235F-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU/F listed solvents - Heterogeneous debris from 235F					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	6.9	0.0	6.9
55-gal Drum Dir Ld w/o Liner	0.4	0.0	0.4
Box - Steel	2.7	0.0	2.7
Pipe - Steel	1.3	0.0	1.3
SWB Dir Ld w/o Liner	7.2	0.0	7.2
Current Form Total	18.5	0.0	18.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	5.8	0.0	5.8
SLB2 (5' x 5' x 8) Dir Ld	11.3	0.0	11.3
SWB Dir Ld w/o Liner	15.1	0.0	15.1
SWB w/ 4 - 55-gal Drums w/ Liners	3.8	0.0	3.8
SWB w/ 4 - 55-gal Drums w/o Liners	1.9	0.0	1.9
Final Form Total	37.9	0.0	37.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	31.07
Aluminum-based Metal/Alloys	0.87
Other Metal/Alloys	1.55
Other Inorganic Materials	4.35
Cellulosics	5.37
Rubber	14.64
Plastics	26.43
Cement	0.00
Solidified Inorganic Material	0.10
Solidified Organic Material	0.05
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	7.31
Packaging Material, Rubber	0.27
Packaging Material, Steel	177.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.44E-01
Am-243	8.27E-07
Cm-244	1.57E-04
Cs-137	1.26E-06
Np-237	2.40E-03
Pu-238	6.65E+01
Pu-239	9.11E-02
Pu-240	3.92E-02
Pu-241	2.51E+00
Pu-242	7.51E-05
Sr-90	1.25E-06
Th-229	6.56E-08
Th-230	9.84E-07
Th-232	8.47E-07
U-233	1.24E-04
U-234	1.84E-02
U-235	1.79E-06
U-236	6.97E-09
U-238	8.13E-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

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..

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-235F-HOM**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	CH mixed TRU S3000 solids from 235F					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	4.2	0.0	4.2
Current Form Total	4.2	0.0	4.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2.9	0.0	2.9
SWB w/ 4 - 55-gal Drums w/ Liners	3.8	0.0	3.8
Final Form Total	6.7	0.0	6.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	1.74
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	1.74
Cellulosics	1.74
Rubber	1.74
Plastics	5.23
Cement	0.00
Solidified Inorganic Material	162.06
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	25.33
Packaging Material, Rubber	0.50
Packaging Material, Steel	176.15
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.27E-01
Np-237	6.49E-07
Pu-238	1.35E+02
Pu-239	1.09E-01
Pu-240	5.98E-02
Pu-241	1.25E+00
Pu-242	7.13E-05
Th-229	1.38E-14
Th-230	7.80E-07
Th-232	1.75E-17
U-233	2.52E-11
U-234	8.26E-03
U-235	2.16E-09
U-236	3.54E-08
U-238	2.21E-13

Haz. Waste No(s).

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

TRUCON Code(s)

122/222

Waste Stream Description

This waste consists of sludge from tank cleanout.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-321-322M-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU Debris (S5000)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	4.4	0.0	4.4
Current Form Total	4.4	0.0	4.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	4.4	0.0	4.4
Final Form Total	4.4	0.0	4.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	141.74
Aluminum-based Metal/Alloys	3.63
Other Metal/Alloys	8.34
Other Inorganic Materials	18.49
Cellulosics	23.56
Rubber	68.51
Plastics	97.15
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	1.09
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.41E+00
Np-237	5.30E-04
Pu-238	1.97E-02
Pu-239	4.21E-02
Pu-240	9.93E-03
Pu-241	3.40E+01
Pu-242	1.73E-06
Th-229	9.29E-11
Th-230	2.90E-10
Th-232	6.98E-18
U-233	6.89E-08
U-234	1.95E-06
U-235	1.29E-09
U-236	9.12E-09
U-238	8.33E-15

Haz. Waste No(s).

D008, D009, F001, F002

TRUCON Code(s)

125/225, 129/229

Waste Stream Description

CH Mixed TRU waste resulting from target assembly fabrication leading to production of defense related nuclear materials.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-321M-HOM**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU Homogeneous Solids (S3000)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	2.22
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	3.63
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	61.38
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.76E+00
Np-237	2.84E-05
Pu-238	1.12E+00
Th-229	1.76E-12
Th-230	1.64E-08
U-233	1.93E-09
U-234	1.11E-04

Haz. Waste No(s).

D008, F002

TRUCON Code(s)

127/227

Waste Stream Description

CH Mixed TRU waste resulting from target assembly fabrication leading to production of defense related nuclear materials.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-773A-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU/F listed solvents - Heterogeneous debris from 773A					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	6.1	0.0	6.1
55-gal Drum Dir Ld w/o Liner	16.0	69.9	85.9
Box - Fiberglass	3.4	0.0	3.4
Box - Plywood	1.7	0.0	1.7
Box - Steel	2.6	0.0	2.6
SLB2 (5' x 5' x 8) Dir Ld	66.3	0.0	66.3
SWB Dir Ld w/o Liner	37.8	34.2	72.0
Current Form Total	133.8	104.1	237.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	5.8	0.0	5.8
55-gal Drum Dir Ld w/o Liner	15.8	69.3	85.1
SLB2 (5' x 5' x 8) Dir Ld	56.6	0.0	56.6
SWB Dir Ld w/o Liner	54.8	35.9	90.7
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	134.9	105.2	240.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	36.57
Aluminum-based Metal/Alloys	0.73
Other Metal/Alloys	1.69
Other Inorganic Materials	19.37
Cellulosics	10.48
Rubber	9.29
Plastics	37.68
Cement	0.00
Solidified Inorganic Material	0.22
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.03
Packaging Material, Rubber	0.32
Packaging Material, Steel	159.95
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.14E-01
Am-243	1.52E-03
Cm-244	1.08E-01
Cs-137	1.00E-03
Np-237	3.19E-04
Pu-238	1.33E+01
Pu-239	4.90E-01
Pu-240	1.13E-01
Pu-241	1.80E+00
Pu-242	2.33E-05
Sr-90	9.92E-04
Th-229	2.99E-08
Th-230	1.42E-07
Th-232	7.63E-07
U-233	5.66E-05
U-234	2.69E-03
U-235	1.37E-06
U-236	2.01E-08
U-238	1.48E-05

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. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-773A-HOM**

Appendix A
Waste Profile Report

Site	Savannah River Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Analytical Laboratory Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU Homogeneous Solids (S3000)					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Current Form Total	0.6	0.0	0.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.80
Aluminum-based Metal/Alloys	0.02
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	3.83
Rubber	1.21
Plastics	12.12
Cement	0.00
Solidified Inorganic Material	49.58
Solidified Organic Material	133.86
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.87E-02
Np-237	5.11E-08
Pu-238	3.72E+01
Pu-239	5.09E-02
Pu-240	2.10E-02
Pu-241	5.36E-01
Pu-242	1.97E-05
Th-229	4.01E-16
Th-230	1.17E-07
Th-232	3.46E-18
U-233	1.17E-12
U-234	1.67E-03
U-235	7.53E-10
U-236	9.34E-09
U-238	4.60E-14

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D043, F002, F004, F005

TRUCON Code(s)

127/227

Waste Stream Description

CH Mixed TRU Homogeneous Solids resulting from liquid absorption at the SRNL.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-776A-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU/F listed solvents - Heterogeneous debris from 776A					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Box - SRS B-25 OP	7.2	0.0	7.2
Box - Steel	40.8	0.0	40.8
SLB2 (5' x 5' x 8) Dir Ld	19.9	0.0	19.9
SWB Dir Ld w/o Liner	5.4	0.0	5.4
Current Form Total	73.3	0.0	73.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SLB2 (5' x 5' x 8) Dir Ld	17.0	0.0	17.0
SWB Dir Ld w/o Liner	54.8	0.0	54.8
Final Form Total	71.8	0.0	71.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	21.64
Aluminum-based Metal/Alloys	1.03
Other Metal/Alloys	2.69
Other Inorganic Materials	10.68
Cellulosics	6.34
Rubber	3.72
Plastics	22.67
Cement	0.00
Solidified Inorganic Material	0.07
Solidified Organic Material	0.07
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.18
Packaging Material, Steel	168.13
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.98E-04
Cs-137	2.06E-02
Np-237	7.99E-10
Pu-238	2.05E-01
Pu-239	5.74E-04
Pu-240	1.87E-04
Pu-241	3.42E-03
Pu-242	1.25E-07
Sr-90	1.41E-02
Th-229	1.29E-17
Th-230	1.31E-09
Th-232	6.04E-20
U-233	2.65E-14
U-234	1.32E-05
U-235	1.19E-11
U-236	1.17E-10
U-238	4.09E-16

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D043, F002, F004, F005

TRUCON Code(s)

125/225, 154

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. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-FB-Pre86-C**

Appendix A
Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH Mixed TRU - Heterogeneous debris from 221H					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	40.1	0.0	40.1
Box - Steel	2.3	0.0	2.3
SLB2 (5' x 5' x 8) Dir Ld	39.8	0.0	39.8
SWB Dir Ld w/o Liner	7.2	0.0	7.2
Current Form Total	89.4	0.0	89.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	39.3	0.0	39.3
SLB2 (5' x 5' x 8) Dir Ld	34.0	0.0	34.0
SWB Dir Ld w/o Liner	11.3	0.0	11.3
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	86.5	0.0	86.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	27.87
Aluminum-based Metal/Alloys	0.29
Other Metal/Alloys	0.36
Other Inorganic Materials	9.40
Cellulosics	9.27
Rubber	9.29
Plastics	64.84
Cement	0.00
Solidified Inorganic Material	0.21
Solidified Organic Material	0.05
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	17.20
Packaging Material, Rubber	0.35
Packaging Material, Steel	168.78
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.09E+00
Am-243	1.45E-06
Cm-244	1.46E-03
Cs-137	2.80E-06
Np-237	5.63E-05
Pu-238	3.39E-01
Pu-239	2.74E+00
Pu-240	7.86E-01
Pu-241	3.56E+00
Pu-242	1.44E-04
Sr-90	2.70E-06
Th-229	2.94E-08
Th-230	1.82E-08
Th-232	7.93E-08
U-233	1.34E-05
U-234	9.18E-05
U-235	2.58E-07
U-236	5.82E-07
U-238	8.59E-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, 133/233, 154

Waste Stream Description

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste. Small HEPA filters, sludges, resins, absorbed liquids, and metal equipment is also in present in the waste stream.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-HBL-Box**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH mixed TRU from 221H					**Activity Concentrations Decayed to CY**	2011

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	70.6	0.0	70.6
85-gal Drum Dir Ld w/o Liner	0.7	0.0	0.7
Box - Fiberglass	3.4	0.0	3.4
Box - SRS B-25 OP	18.0	0.0	18.0
Box - SRS Black Box	170.8	0.0	170.8
Box - Steel	46.4	0.0	46.4
Box - Steel SS	28.8	0.0	28.8
SLB2 (5' x 5' x 8) Dir Ld	437.6	0.0	437.6
SWB Dir Ld w/o Liner	239.4	0.0	239.4
Current Form Total	1015.6	0.0	1015.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	70.7	0.0	70.7
SLB2 (5' x 5' x 8) Dir Ld	515.1	0.0	515.1
SWB Dir Ld w/o Liner	491.4	0.0	491.4
Final Form Total	1077.2	0.0	1077.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	34.35
Aluminum-based Metal/Alloys	0.01
Other Metal/Alloys	0.01
Other Inorganic Materials	4.05
Cellulosics	48.17
Rubber	1.77
Plastics	30.48
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.19
Packaging Material, Steel	181.65
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.56E-03
Am-243	2.03E-10
Cm-244	5.44E-05
Cs-137	3.62E-07
Np-237	4.78E-05
Pu-238	1.94E+00
Pu-239	1.06E-02
Pu-240	3.32E-03
Pu-241	2.06E-02
Pu-242	4.80E-06
Sr-90	3.50E-07
Th-229	4.01E-12
Th-230	8.90E-08
Th-232	1.07E-18
U-233	4.34E-09
U-234	5.22E-04
U-235	5.61E-09
U-236	2.07E-09
U-238	1.56E-14

Haz. Waste No(s).

D006, D007, D008, D009, D011, D019, D022, D029, D043, F002, F005, U133

TRUCON Code(s)

125/225, 154

Waste Stream Description

This waste stream is defense related debris consisting of large equipment and job control waste packaged in large steel boxes

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

APPENDIX B POTENTIAL TRU WASTE PROFILE REPORTS

The following waste profile reports contain information on potential TRU waste streams as of the inventory date, December 31, 2011. These waste streams have been placed in the potential category for various reasons as stated in section 4.0 of this report, if available.

The TRU waste sites that have reported potential TRU waste streams are:

AW	Material and Fuels Complex
BL	Babcock and Wilcox Nuclear Energy Services
IN	Idaho National Laboratory
LA	Los Alamos National Laboratory
RL	Hanford (Richland) Site
RP	Hanford (River Protection) Site
SR	Savannah River Site
WV	West Valley Demonstration Project

Waste Stream ID: **AW-IN-TRA-BE-01**

Appendix B

Waste Profile Report

Site	Material and Fuels Complex	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Uncategorized Metal Waste			**Inventory Date**	12/31/2011
Stream Name	TRA Beryllium Blocks					**Activity Concentrations as of CY**	2001

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Beryllium Reflector Block	9.0	10.8	19.8
Shim Control Cylinder	6.2	5.4	11.5
Current Form Total	15.2	16.2	31.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid - Dir Ld	15.1	16.0	31.2
Final Form Total	15.1	16.0	31.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	429.85
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.00
Packaging Material, Steel	560.67
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.90E-02
Cs-137	6.12E+00
Pu-238	2.96E-02
Pu-239	5.91E-03
Pu-240	1.54E-02
Pu-241	1.97E+00
Pu-242	3.24E-04
Sr-90	1.80E+00
U-233	2.15E-05
U-234	5.51E-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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **AW-W018**

Appendix B

Waste Profile Report

Site	Material and Fuels Complex	**Summary Category**	X7000	**Defense Determination**	Pending Determination	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Prohibited Waste			**Inventory Date**	12/31/2011
Stream Name	SODIUM - TRU					**Activity Concentrations as of CY**	1996

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Liner - RSWF	2.6	0.0	2.6
Current Form Total	2.6	0.0	2.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid - Dir Ld	2.7	0.0	2.7
Final Form Total	2.7	0.0	2.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	2361.27
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	295.19
Other Inorganic Materials	147.59
Cellulosics	147.59
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.00
Packaging Material, Steel	560.67
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.43E-03
Cs-137	5.81E+02
Np-237	2.39E-05
Pu-238	1.08E-01
Pu-239	2.39E+01
Pu-240	1.24E+01
Sr-90	5.43E+02
U-235	2.10E-03
U-238	1.49E-03

Haz. Waste No(s).

D001, D003

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 (D001/D003) 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 (EPA technology code DEACT) to remove sodium from the TRU waste 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 B

Waste Profile Report

Site	Material and Fuels Complex	**Summary Category**	X7000	**Defense Determination**	Pending Determination	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Prohibited Waste			**Inventory Date**	12/31/2011
Stream Name	SODIUM POTASSIUM -NaK- TRU					**Activity Concentrations as of CY**	1996

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Liner - RSWF	0.3	0.0	0.3
Current Form Total	0.3	0.0	0.3

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

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	847.04
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	116.15
Other Inorganic Materials	58.07
Cellulosics	58.07
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.00
Packaging Material, Steel	560.67
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Cs-137	4.02E+02
Pu-239	1.43E-01
Pu-240	5.48E-02
Sr-90	3.93E+02
U-235	2.37E-04
U-238	1.47E-04

Haz. Waste No(s).

D003

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 (D003) 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 (EPA technology code DEACT) to remove NaK from the TRU waste prior to disposal at WIPP. Final waste form has not been determined yet.

Waste Stream ID: **BL-Parks**

Appendix B

Waste Profile Report

Site	Babcock and Wilcox Nuclear Energy Services	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	Source Information Not Compiled	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Parks Township TRU Waste					**Activity Concentrations as of CY**	2000

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	4.0	0.0	4.0
Box - Steel	5.7	0.0	5.7
Current Form Total	9.6	0.0	9.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	4.0	0.0	4.0
SWB Dir Ld w/o Liner	5.7	0.0	5.7
Final Form Total	9.6	0.0	9.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.35
Packaging Material, Steel	144.13
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.99E+00
Cs-137	4.11E-03
Pu-238	3.44E+00
Pu-239	1.82E+01
Pu-240	6.85E+00
Pu-241	1.83E+02
Pu-242	4.04E-03
U-234	3.08E-05
U-235	1.40E-06
U-238	2.79E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

10.05 m3 of waste from Parks Township ROD 63FR3629, 65FR82985, 69FR39446 amended 27 February 2008 Point of Contact William Spurgeon (Any reference to 45m3, Matt Hutmaker, B&W is not related to BL-Parks)

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **BL-Parks-A**

Appendix B

Waste Profile Report

Site	Babcock and Wilcox Nuclear Energy Services	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	RH
Source Cat.	Source Information Not Compiled	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Parks Township TRU Waste					**Activity Concentrations as of CY**	2000

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Box - Misc	0.2	0.0	0.2
Current Form Total	0.4	0.0	0.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.70
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.35E-01
Pu-239	6.29E+00

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

10.05 m3 of waste from Parks Township ROD 63FR3629, 65FR82985, 69FR39446 amended 27 February 2008 Point of Contact William Spurgeon (Any reference to 45m3, Matt Hutmaker, B&W is not related to BL-Parks)

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-JH826CH**

Appendix B

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	J.C. Haynes Waste					**Activity Concentrations as of CY**	1985

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Box - Misc	3.2	0.0	3.2
Current Form Total	3.2	0.0	3.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.8	0.0	0.8
Final Form Total	0.8	0.0	0.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.27E+01

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Am-241 contaminated debris waste

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-SBW-01A**

Appendix B

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	SBW Treatment - Steam Reforming - Carbonate Waste Form					**Activity Concentrations as of CY**	2006

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Tank(s)	3520.0	0.0	3520.0
Current Form Total	3520.0	0.0	3520.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid - Dir Ld	599.0	0.0	599.0
Final Form Total	599.0	0.0	599.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	1334.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.00
Packaging Material, Steel	560.67
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.27E-01
Am-243	2.85E-04
Cm-244	2.02E-03
Cs-137	2.90E+02
Np-237	4.03E-03
Pu-238	6.22E+00
Pu-239	6.75E-01
Pu-240	2.50E-01
Pu-241	2.54E+00
Pu-242	1.29E-04
Sr-90	1.90E+02
U-233	5.64E-05
U-234	8.98E-03
U-235	2.20E-04
U-238	2.16E-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 673 canisters with a surface dose rate <100 Rem/hr.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-SBW-01B**

Appendix B

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	SBW Treatment - Steam Reforming Process - Debris					**Activity Concentrations as of CY**	2010

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid - Dir Ld	0.0	89.0	89.0
Current Form Total	0.0	89.0	89.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid - Dir Ld	0.0	89.0	89.0
Final Form Total	0.0	89.0	89.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	700.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	2.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.00
Packaging Material, Steel	560.67
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.27E-03
Am-243	2.85E-06
Cm-244	2.02E-05
Cs-137	2.90E+00
Np-237	4.03E-05
Pu-238	6.22E-02
Pu-239	6.75E-03
Pu-240	2.50E-03
Pu-241	2.54E-02
Pu-242	1.29E-06
Sr-90	1.90E+00
U-233	5.64E-07
U-234	8.98E-05
U-235	2.20E-06
U-238	2.16E-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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-W139**

Appendix B

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Mexican Americium Waste					**Activity Concentrations as of CY**	1986

Waste Volume Detail (m^3)

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

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.8	0.0	0.8
Final Form Total	0.8	0.0	0.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	2.50E+00

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of Americium contaminated debris waste.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-W269**

Appendix B

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Laboratory Waste					**Activity Concentrations as of CY**	1989

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	24.1	0.0	24.1
Current Form Total	24.1	0.0	24.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	24.1	0.0	24.1
Final Form Total	24.1	0.0	24.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	6.79E+00
Pu-238	7.93E+00
Pu-239	6.97E+01
Pu-240	7.22E+00
Pu-241	2.65E-01
Pu-242	2.46E-05
U-235	1.21E-02
U-238	7.44E-05

Haz. Waste No(s).

D006, D007, D008, D011

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at the ANL-W, may include fluxwire, fission counters, glassware, vials, miscellaneous waste from gloveboxes, aluminum foil and capsules, ion exchange resins, plutonium sources, and uranium pellets. Waste may also contain <50% by volume analytical samples and pellets dissolved and absorbed in Oil-Dri.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-W322**

Appendix B

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Unknown	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Uncategorized Metal Waste			**Inventory Date**	12/31/2011
Stream Name	Actinide Neutron Sources					**Activity Concentrations as of CY**	1989

Waste Volume Detail (m^3)

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

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	5.7	0.0	5.7
Final Form Total	5.7	0.0	5.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	139.10
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Pu-239	4.83E+00
Pu-240	1.00E+00
U-235	1.31E-04

Haz. Waste No(s).

D008

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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-W338**

Appendix B

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Source Information Not Compiled	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	ANL-W ACL Cold-Line Absorbed Liquid and Debris					**Activity Concentrations as of CY**	1989

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.2	0.0	1.2
Current Form Total	1.2	0.0	1.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.2	0.0	1.2
Final Form Total	1.2	0.0	1.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Pu-239	4.67E-01
U-235	1.17E-04

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream was generated at ANL-W, includes solidified liquids, miscellaneous hardware, and polyethylene.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-W339**

Appendix B

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Source Information Not Compiled	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	ANL-W FMF EFL: Zr-U-Pu Fuel Casting					**Activity Concentrations as of CY**	1989

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	10.2	0.0	10.2
Current Form Total	10.2	0.0	10.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	10.2	0.0	10.2
Final Form Total	10.2	0.0	10.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Pu-239	9.20E+00
Pu-240	3.76E-02
U-235	6.94E-04

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream was generated at ANL-W. It consists of solid zirconium, uranium, and plutonium fuel casting metal alloy wastes. The waste is a solid with small amounts of glass powder from broken glass molds. The waste is created when the metal is heated in a crucible and then pressurized into the glass molds. The glass molds are broken to remove the fuel pins, and the remaining molds, crucibles, and residues constitute the waste.

Waste Stream ID: **IN-W342R**

Appendix B

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S9000	**Defense Determination**	Unknown	**Handling**	RH
Source Cat.	Source Information Not Compiled	**Waste Matrix Code Group**	Unknown			**Inventory Date**	12/31/2011
Stream Name	Miscellaneous Radionuclide Sources					**Activity Concentrations as of CY**	1989

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
Current Form Total	0.4	0.0	0.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	158.69
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	3.51E+00
Pu-239	3.04E-02

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream generated at the INEL, is believed to contain radionuclide sources (e.g., Pu-239, Cf-252 and Am-241) from calibration units across the INL site.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-W350**

Appendix B

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S9000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	Source Information Not Compiled	**Waste Matrix Code Group**	Unknown			**Inventory Date**	12/31/2011
Stream Name	Special Source Material (UNK)					**Activity Concentrations as of CY**	1989

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
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, generated at ANL-E.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-W359R**

Appendix B

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	RH
Source Cat.	Source Information Not Compiled	**Waste Matrix Code Group**	Uncategorized Metal Waste			**Inventory Date**	12/31/2011
Stream Name	Neutron Sources					**Activity Concentrations as of CY**	1989

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Current Form Total	0.6	0.0	0.6

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Pu-238	2.01E+02

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream generated by Bettis Atomic Laboratory consists of two Pu-238-Be sources and one Pu-238-Li source.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-W360**

Appendix B

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S9000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	Source Information Not Compiled	**Waste Matrix Code Group**	Prohibited Waste			**Inventory Date**	12/31/2011
Stream Name	Miscellaneous Sources					**Activity Concentrations as of CY**	1989

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	52.51
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	16.30
Packaging Material, Rubber	0.44
Packaging Material, Steel	211.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Pu-238	1.35E-01
Pu-239	3.83E+00
Pu-240	8.71E-01
Pu-241	2.31E+01
Pu-242	6.26E-05

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

The waste stream generated by Bettis Atomic Laboratory consists of two sources.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-OS-00-04**

Appendix B

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Uncategorized Metal Waste			**Inventory Date**	12/31/2011
Stream Name	Metal debris from Off-Site Source Recovery (OSR) project					**Activity Concentrations as of CY**	N/A

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal POC - 12" w/ Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal POC - 12" w/ Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	135.10
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	528.85
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

Haz. Waste No(s).
D006, D008

TRUCON Code(s)
120/220

Waste Stream Description

Manufactured sealed sources in metal containers which are placed inside metal POCs that are then packaged into 55-gallon drums.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-00-04**

Appendix B

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2011
Stream Name	Absorbed Liquid Waste					**Activity Concentrations as of CY**	2007

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	2.40
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.88
Cellulosics	0.00
Rubber	0.00
Plastics	3.76
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	19.13
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.07E-03
Pu-238	1.28E-03
Pu-239	4.35E-02
Pu-240	1.02E-02
Pu-241	1.53E-01
Pu-242	5.86E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005, U003, U044, U080, U196, U213

TRUCON Code(s)

112/212

Waste Stream Description

Inorganic particulate waste generated during TA-55 R&D/fabrication and associated recovery, facility and equipment maintenance, D&D, waste repackaging, and below-grade retrieval operations.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-03-17**

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Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Hepa Filters					**Activity Concentrations as of CY**	N/A

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Box - Crate	19.2	0.0	19.2
Current Form Total	19.2	0.0	19.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	18.9	0.0	18.9
Final Form Total	18.9	0.0	18.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	11.96
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	3.91
Other Inorganic Materials	18.97
Cellulosics	15.28
Rubber	1.55
Plastics	44.87
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.30
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.20
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.44
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Hepa Filters

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-03-21**

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Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Metals and Miscellaneous Equipment Debris					**Activity Concentrations as of CY**	N/A

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Box - Crate	93.4	0.0	93.4
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Current Form Total	95.3	0.0	95.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	94.5	0.0	94.5
Final Form Total	94.5	0.0	94.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	32.72
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	10.70
Other Inorganic Materials	51.91
Cellulosics	41.81
Rubber	4.24
Plastics	122.76
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.82
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.20
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.44
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

Haz. Waste No(s).
D008

TRUCON Code(s)
125/225, 154

Waste Stream Description

Metals and Miscellaneous Equipment Debris

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-03-23**

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Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Hepa Filters					**Activity Concentrations as of CY**	N/A

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Box - Crate	66.4	0.0	66.4
Current Form Total	66.4	0.0	66.4

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	66.2	0.0	66.2
Final Form Total	66.2	0.0	66.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	10.95
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	3.58
Other Inorganic Materials	17.37
Cellulosics	13.99
Rubber	1.42
Plastics	41.08
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.27
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.20
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.44
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Hepa Filters

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-03-33**

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Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Source Information Not Compiled	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Combustibles and noncombustibles					**Activity Concentrations as of CY**	N/A

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
30-gal Drum	0.1	0.0	0.1
Current Form Total	0.1	0.0	0.1

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	16.16
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	5.29
Other Inorganic Materials	25.63
Cellulosics	20.65
Rubber	2.09
Plastics	60.62
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.41
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225, 154

Waste Stream Description

Special items (precious metals) requiring tracking by CST-7

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-21-11**

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Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	NonCombustible Building Debris					**Activity Concentrations as of CY**	N/A

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Box - Crate	15.9	0.0	15.9
Other	2.1	0.0	2.1
Current Form Total	18.0	0.0	18.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	17.0	0.0	17.0
Final Form Total	17.0	0.0	17.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	41.02
Aluminum-based Metal/Alloys	15.64
Other Metal/Alloys	31.44
Other Inorganic Materials	8.94
Cellulosics	26.65
Rubber	20.59
Plastics	15.32
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.20
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.44
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

NonCombustible Building Debris

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-50-12**

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Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Metal					**Activity Concentrations as of CY**	N/A

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Box - Crate	8.1	0.0	8.1
SWB Dir Ld w/ Liner	2.4	0.0	2.4
Current Form Total	10.7	0.0	10.7

Final 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	9.5	0.0	9.5
Final Form Total	9.7	0.0	9.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	119.93
Aluminum-based Metal/Alloys	43.66
Other Metal/Alloys	44.31
Other Inorganic Materials	4.87
Cellulosics	8.97
Rubber	8.27
Plastics	9.06
Cement	0.00
Solidified Inorganic Material	2.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.97
Packaging Material, Rubber	0.20
Packaging Material, Steel	152.95
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

Haz. Waste No(s).
D008

TRUCON Code(s)
125/225, 154

Waste Stream Description
Metal

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***
NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-50-15**

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Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Heterogeneous Debris					**Activity Concentrations as of CY**	1987

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Other	7.7	0.0	7.7
Current Form Total	7.7	0.0	7.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	7.6	0.0	7.6
Final Form Total	7.6	0.0	7.6

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	235.51
Aluminum-based Metal/Alloys	85.73
Other Metal/Alloys	87.01
Other Inorganic Materials	9.56
Cellulosics	17.61
Rubber	16.24
Plastics	17.80
Cement	0.00
Solidified Inorganic Material	3.93
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.20
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.44
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.86E-02
Cs-137	1.94E+04
Pu-238	1.21E-02
Pu-239	4.13E-01
Pu-240	9.66E-02
Pu-241	1.46E+00
Pu-242	5.56E-06
Sr-90	1.37E+04
U-234	8.85E-07
U-235	1.53E-08

Haz. Waste No(s).

D008

TRUCON Code(s)

125/225, 154

Waste Stream Description

Mixed heterogeneous combustible and non-combustible debris from the TA-50-01 RLWTF, TA-50-37 CAI, and TA-50-69 WCRR Facility generated during facility and equipment maintenance, decontamination and decommissioning (D&D), and waste repackaging activities.

Waste Stream ID: **LA-TA-50-20**

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Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Plutonium contaminated soil (non-mixed)					**Activity Concentrations as of CY**	N/A

Waste Volume Detail (m^3)

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
Current Form Total	0.5	0.0	0.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
Final Form Total	0.4	0.0	0.4

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.07
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.07
Cement	0.00
Solidified Inorganic Material	0.22
Solidified Organic Material	0.00
Soils	741.39
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	37.07
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TRU-Empty**

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Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Empty containers					**Activity Concentrations as of CY**	2009

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner (LANL)	0.8	0.0	0.8
85-gal Drum w/ 1 - 55-gal Drum w/ Liner (LANL)	101.4	0.0	101.4
Current Form Total	102.3	0.0	102.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	32.1	0.0	32.1
Final Form Total	32.1	0.0	32.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.20
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.44
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.23E-01
Am-243	4.37E-05
Cs-137	5.46E-08
Np-237	3.96E-06
Pu-238	3.31E-01
Pu-239	1.87E-01
Pu-240	4.56E-02
Pu-241	4.13E-01
Pu-242	4.63E-10
Sr-90	5.46E-08
Th-229	8.06E-08
U-234	5.27E-05
U-235	2.68E-08
U-238	5.08E-08

No Hazardous Waste Numbers Provided

TRUCON Code(s)

116/216, 117/217, 123/223, 125/225, 154

Waste Stream Description

Empty containers identified as TRU resulting from repackaging/remediation of debris waste streams

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL300-11**

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Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	300 Area TRU RH Non-Mixed Debris					**Activity Concentrations as of CY**	2001

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Box - Misc	5.7	0.0	5.7
Current Form Total	5.7	0.0	5.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	7.5	0.0	7.5
Final Form Total	7.5	0.0	7.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	87.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	666.12
Cellulosics	21.75
Rubber	0.00
Plastics	5.44
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.35E-01
Am-243	3.33E-01
Cs-137	5.32E+05
Np-237	2.32E-06
Pu-238	8.20E-01
Pu-239	3.22E-01
Pu-240	1.23E-01
Pu-241	5.42E+00
Pu-242	2.17E-04
Sr-90	3.85E+05
Th-232	1.25E-05
U-234	4.64E-05
U-235	7.08E-07
U-236	1.72E-06
U-238	1.25E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLCH2-08**

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Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	Tank Farms TRU RH Mixed Debris					**Activity Concentrations as of CY**	2001

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Uncontained	0.0	279.1	279.1
Current Form Total	1.9	279.1	281.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	2.5	279.6	282.0
Final Form Total	2.5	279.6	282.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	3.09
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	374.77
Other Inorganic Materials	7.39
Cellulosics	0.00
Rubber	46.03
Plastics	12.79
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.97E-02
Cs-137	4.45E+00
Pu-238	7.73E-04
Pu-239	4.45E-02
Pu-240	8.61E-03
Sr-90	2.04E+02
U-235	1.74E-05
U-238	4.05E-04

Haz. Waste No(s).

D030, D032, F001, F002, F003, F004, F005

TRUCON Code(s)

325

Waste Stream Description

RH waste- 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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPFP-10**

Appendix B

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2011
Stream Name	PFP RH-TRU Contaminated Soil					**Activity Concentrations as of CY**	2010

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Uncontained	0.0	23.0	23.0
Current Form Total	0.0	23.0	23.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	0.0	23.1	23.1
Final Form Total	0.0	23.1	23.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	45.67
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	9.96E-01
Am-243	9.96E-01
Pu-238	9.96E-01
Pu-239	9.96E-01
Pu-240	9.96E-01
Pu-241	9.96E-01
Pu-242	9.96E-01

No Hazardous Waste Numbers Provided

TRUCON Code(s)

311

Waste Stream Description

Soil remediation wastes in PFP Zone.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPRC-01**

Appendix B

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Unknown	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CUPRC TRU Mixed Debris					**Activity Concentrations as of CY**	1987

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Current Form Total	1.9	0.0	1.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	46.45
Other Inorganic Materials	661.59
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.20
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.44
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.89E-02
Pu-238	1.99E-02
Pu-239	1.82E-01
Pu-240	4.65E-02
Pu-241	1.28E+00
Pu-242	3.11E-06
Th-232	5.50E-05
U-234	6.24E-07
U-235	2.82E-08
U-238	6.06E-07

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 CEER University Laboratory.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RP-TFC001**

Appendix B

Waste Profile Report

Site	Hanford (River Protection) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Bismuth Phosphate Process TRU Solids					**Activity Concentrations as of CY**	2004

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Tank(s)	1200.0	0.0	1200.0
Current Form Total	1200.0	0.0	1200.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	438.7	0.0	438.7
Final Form Total	438.7	0.0	438.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	1.60
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
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

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RP-W754**

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Waste Profile Report

Site	Hanford (River Protection) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	224 Waste					**Activity Concentrations as of CY**	2004

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Tank(s)	1079.0	0.0	1079.0
Current Form Total	1079.0	0.0	1079.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	323.2	0.0	323.2
Final Form Total	323.2	0.0	323.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	1.60
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RP-W755**

Appendix B

Waste Profile Report

Site	Hanford (River Protection) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	Bismuth Phosphate Process TRU Solids					**Activity Concentrations as of CY**	2004

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Tank(s)	3090.0	0.0	3090.0
Current Form Total	3090.0	0.0	3090.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	793.5	0.0	793.5
Final Form Total	793.5	0.0	793.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	1.60
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
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

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-T001-WSB-1**

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Waste Profile Report

Site	Savannah River Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	N/A					**Activity Concentrations as of CY**	2015

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.0	4556.2	4556.2
Current Form Total	0.0	4556.2	4556.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.0	4512.8	4512.8
Final Form Total	0.0	4512.8	4512.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
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

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

This waste stream is defense related, contact handled TRU and is a neutralized aqueous stream solidified in an inorganic matrix.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-773A-HET-CLAS**

Appendix B

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH TRU - Sensitive waste from 773A					**Activity Concentrations as of CY**	1990

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
Box - Steel	10.1	0.0	10.1
SWB Dir Ld w/o Liner	5.4	0.0	5.4
Current Form Total	15.9	0.0	15.9

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/o Liner	17.0	0.0	17.0
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	18.9	0.0	18.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	162.00
Aluminum-based Metal/Alloys	7.74
Other Metal/Alloys	20.12
Other Inorganic Materials	79.97
Cellulosics	47.46
Rubber	27.86
Plastics	169.74
Cement	0.00
Solidified Inorganic Material	0.52
Solidified Organic Material	0.52
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	1.63
Packaging Material, Rubber	0.22
Packaging Material, Steel	159.21
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225, 154

Waste Stream Description

This waste stream is defense related, contact handled TRU waste and is composed of metal equipment and debris

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-UNK**

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Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Source Unknown	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	SRS "Generating Source Unknown" TRU Waste					**Activity Concentrations as of CY**	N/A

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2.5	0.0	2.5
Box - Concrete	9.5	0.0	9.5
Box - SRS B-25 OP	3.6	0.0	3.6
Box - Steel	20.6	0.0	20.6
Current Form Total	36.2	0.0	36.2

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	2.5	0.0	2.5
SWB Dir Ld w/o Liner	34.0	0.0	34.0
Final Form Total	36.5	0.0	36.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	168.13
Aluminum-based Metal/Alloys	8.03
Other Metal/Alloys	20.88
Other Inorganic Materials	82.99
Cellulosics	49.26
Rubber	28.91
Plastics	176.16
Cement	0.00
Solidified Inorganic Material	0.54
Solidified Organic Material	0.54
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.22
Packaging Material, Steel	151.89
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225, 154

Waste Stream Description

This waste stream consists of legacy plutonium contaminated debris from SRS facilities. The unique identification for these waste containers has been lost. Thus, knowledge of the generation source that would allow the waste to be placed in the proper waste stream is not known at this time. Some waste may be remote handled.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **WV-M010a**

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Waste Profile Report

Site	West Valley Demonstration Project	**Summary Category**	S3000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2011
Stream Name	TRU Spent Absorbents CH					**Activity Concentrations as of CY**	2008

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Box - Misc	17.5	0.0	17.5
Current Form Total	17.5	0.0	17.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/o Liner	9.5	0.0	9.5
Final Form Total	9.5	0.0	9.5

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	249.74
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.19
Packaging Material, Steel	153.44
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	5.61E-02
Am-243	3.15E-03
Cs-137	8.09E-03
Np-237	4.88E-07
Pu-238	1.83E-02
Pu-239	2.28E-02
Pu-240	1.74E-02
Pu-241	2.44E-01
Pu-242	4.83E-04
Sr-90	7.11E-03
Th-230	4.10E-06
Th-232	2.87E-04
U-233	1.84E-04
U-234	8.79E-05
U-235	2.26E-05
U-236	6.79E-05
U-238	1.09E-04

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of spent absorbents (not cement) generated from site operations. The media absorbed is an organic liquid for this waste stream. This does not contain hazardous waste.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **WV-T004**

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Waste Profile Report

Site	West Valley Demonstration Project	**Summary Category**	S3000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2011
Stream Name	TRU Liquids					**Activity Concentrations as of CY**	2004

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.3	0.0	3.3
Current Form Total	3.3	0.0	3.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	3.3	0.0	3.3
Final Form Total	3.3	0.0	3.3

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	1000.60
Solidified Inorganic Material	250.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.42E-01
Am-243	1.08E-02
Cm-244	1.50E-02
Cs-137	2.27E-05
Pu-238	2.74E-01
Pu-239	1.08E-01
Pu-240	8.27E-02
Pu-241	3.45E+00
Pu-242	3.02E-04
Sr-90	2.63E-04
Th-230	1.52E-07
Th-232	2.34E-09
U-233	1.00E-04
U-234	4.71E-05
U-235	5.58E-06
U-236	1.67E-05
U-238	4.17E-05

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.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **WV-T006a**

Appendix B

Waste Profile Report

Site	West Valley Demonstration Project	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH TRU General Waste					**Activity Concentrations as of CY**	2006

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	93.2	0.0	93.2
Box - Misc	189.6	0.0	189.6
Uncontained	0.0	175.0	175.0
Current Form Total	282.8	175.0	457.8

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	95.3	36.8	132.1
SWB Dir Ld w/o Liner	51.0	141.8	192.8
Final Form Total	146.3	178.6	324.9

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	277.61
Other Inorganic Materials	555.22
Cellulosics	0.00
Rubber	111.04
Plastics	166.57
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.34
Packaging Material, Steel	144.22
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	4.82E+00
Am-243	3.65E-01
Cm-244	5.10E-01
Cs-137	8.79E-03
Pu-238	9.29E+00
Pu-239	3.66E+00
Pu-240	2.80E+00
Pu-241	1.17E+02
Pu-242	1.03E-02
Sr-90	1.02E-01
Th-230	5.89E-05
Th-232	9.05E-07
U-233	2.93E-04
U-234	1.38E-04
U-235	1.63E-05
U-236	4.90E-05
U-238	1.22E-04

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of radiologically contaminated solid waste generated from various site activities. The specific contents include but are not limited to Anti-C clothing, hoses, glovebags, tools, pre-filters, HEPA filters, Roughing filters, other filters, sweeping compound, glove boxes, tools, evaporators, dissolver tanks, condensers, piping DAW, plastic bags, bottles, and cell floor debris etc.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **WV-T006b**

Appendix B

Waste Profile Report

Site	West Valley Demonstration Project	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	RH TRU General Waste					**Activity Concentrations as of CY**	2004

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	75.9	0.0	75.9
Box - Misc	424.8	0.0	424.8
Uncontained	0.0	88.0	88.0
Current Form Total	500.7	88.0	588.7

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	308.9	46.2	355.1
Final Form Total	308.9	46.2	355.1

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	204.93
Other Inorganic Materials	409.87
Cellulosics	0.00
Rubber	81.97
Plastics	122.96
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.70
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	8.59E+00
Cm-244	2.98E-01
Cs-137	1.04E+02
Np-237	2.24E-02
Pu-238	2.80E+00
Pu-239	2.17E+00
Pu-240	1.65E+00
Pu-241	4.87E+01
Sr-90	1.22E+02
Th-232	3.44E-04
U-233	1.31E-02
U-234	6.27E-03
U-235	1.19E-03
U-236	3.58E-03
U-238	4.06E-03

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of radiologically contaminated solid waste generated from various site activities. The specific contents include but are not limited to Anti-C clothing, hoses, glovebags, tools, pre-filters, HEPA filters, Roughing filters, other filters, sweeping compound, glove boxes, tools, evaporators, dissolver tanks, condensers, piping DAW, plastic bags, bottles, and cell floor debris etc.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **WV-T017b**

Appendix B

Waste Profile Report

Site	West Valley Demonstration Project	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	RH TRU Spent Filter Media					**Activity Concentrations as of CY**	2008

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Box - Misc	39.3	0.0	39.3
Current Form Total	39.3	0.0	39.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	23.7	0.0	23.7
Final Form Total	23.7	0.0	23.7

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	356.36
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.70
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	8.18E-02
Cs-137	3.06E+01
Np-237	1.12E-04
Pu-238	2.56E-02
Pu-239	4.92E-02
Pu-240	3.75E-02
Pu-241	4.59E-01
Sr-90	3.58E-01
Th-230	3.03E-05
Th-232	3.79E-05
U-235	1.39E-04
U-236	4.19E-04
U-238	2.19E-04

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 radiologically contaminated equipment was stored.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **WV-W024a**

Appendix B

Waste Profile Report

Site	West Valley Demonstration Project	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	CH TRU Mixed Waste					**Activity Concentrations as of CY**	2006

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	2.7	0.0	2.7
Box - Misc	53.8	0.0	53.8
Current Form Total	56.5	0.0	56.5

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	2.7	0.0	2.7
SWB Dir Ld w/o Liner	26.5	0.0	26.5
Final Form Total	29.2	0.0	29.2

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	250.31
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.23
Packaging Material, Steel	151.34
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	1.42E-01
Am-243	1.08E-02
Cm-244	1.51E-02
Cs-137	2.27E-05
Pu-238	2.74E-01
Pu-239	1.08E-01
Pu-240	8.28E-02
Pu-241	3.46E+00
Pu-242	3.03E-04
Sr-90	2.63E-04
Th-230	1.52E-07
Th-232	2.34E-09
U-233	1.00E-04
U-234	4.72E-05
U-235	5.58E-06
U-236	1.68E-05
U-238	4.18E-05

Haz. Waste No(s).

D006, D007, D008, D009, D010

No TRUCON Codes Provided

Waste Stream Description

Contains hazardous constituents from D&D activities and Laboratory Waste generated onsite in solid forms such as filters, vacuum cans, glove box debris, piping, hoses, pumps, anti C clothing, bags, wipes, and floor debris. If any liquids are found, then the liquid would be solidified and not expected to be TRU.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **WV-W024b**

Appendix B

Waste Profile Report

Site	West Valley Demonstration Project	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2011
Stream Name	RH TRU Mixed Waste					**Activity Concentrations as of CY**	2004

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	20.2	0.0	20.2
Box - Misc	131.1	0.0	131.1
Current Form Total	151.3	0.0	151.3

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	94.8	0.0	94.8
Final Form Total	94.8	0.0	94.8

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	356.62
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	8.70
Packaging Material, Rubber	0.57
Packaging Material, Steel	931.09
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m^3)
Am-241	7.29E+01
Am-243	4.44E+00
Cm-244	9.01E-01
Cs-137	3.13E+02
Np-237	6.66E-02
Pu-238	1.04E+01
Pu-239	7.93E+01
Pu-240	6.02E+01
Pu-241	4.02E+02
Pu-242	2.00E-01
Sr-90	3.76E+02
Th-229	3.81E-03
Th-230	1.40E-03
Th-232	1.01E-03
U-233	1.68E-01
U-234	7.93E-02
U-235	1.33E-02
U-236	4.12E-02
U-238	4.12E-02

Haz. Waste No(s).

D006, D007, D008, D009, D010

No TRUCON Codes Provided

Waste Stream Description

Contains hazardous constituents from D&D activities and Laboratory Waste generated onsite in solid forms such as filters, vacuum cans, glove box debris, piping, hoses, pumps, anti C clothing, bags, wipes, and floor debris. If any liquids are found, then the liquid would be solidified and not expected to be TRU.

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **WV-Z001**

Appendix B

Waste Profile Report

Site	West Valley Demonstration Project	**Summary Category**	S9000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Prohibited Waste			**Inventory Date**	12/31/2011
Stream Name	West Valley Buried TRU Waste					**Activity Concentrations as of CY**	N/A

Waste Volume Detail (m^3)

Current Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
Uncontained	0.0	1353.0	1353.0
Current Form Total	0.0	1353.0	1353.0

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.0	1353.0	1353.0
Final Form Total	0.0	1353.0	1353.0

Waste Material Parameters

Material Parameter	Average Density (kg/m^3)
Iron-based Metal/Alloys	0.00
Aluminum-based Metal/Alloys	0.00
Other Metal/Alloys	0.00
Other Inorganic Materials	249.99
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cement	0.00
Solidified Inorganic Material	0.00
Solidified Organic Material	0.00
Soils	0.00
Vitrified	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Plastic	0.00
Packaging Material, Rubber	0.57
Packaging Material, Steel	130.77
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Debris waste buried on-site during original plant processing operations

Comprehensive Inventory Database ver. ***2.01*** *Data ver.* ***D.11.00***

NOTE: Actual numerical values have been rounded for presentation purposes

APPENDIX C HISTORIC CROSSWALK OF WASTE STREAMS

From one release of the ATWIR report to the next, waste streams may undergo reorganization by the TRU waste sites. Waste streams may be renamed, divided, consolidated, created, or removed from the inventory altogether (i.e., shipped to WIPP or reclassified as LLW). This appendix contains a crosswalk that maps current ATWIR-2012 TRU waste site waste streams to the ATWIR-2011 TRU waste site waste streams. This appendix does not include any emplaced waste at the WIPP.

Table C-1 displays the correlation of each ATWIR-2012 waste stream to its respective ATWIR-2011 waste stream(s). Waste streams that are newly reported in the ATWIR-2012 and that do not map to a previous waste stream from ATWIR-2011 are indicated as "*New Waste Stream*."

Table C-2 shows the inverse of Table C-1. Table C-2 displays the correlation of each ATWIR-2011 waste stream to its respective ATWIR-2012 waste stream(s). Waste streams that were previously reported in the ATWIR-2011 and that do not map to a current ATWIR-2012 waste stream are indicated as "*Deleted Waste Stream*" along with a reason for the deletion, if available.

Site Code and Site Name:

AE	Argonne National Laboratory - East
AW	Material and Fuels Complex
BL	Babcock and Wilcox Nuclear Energy Services
BT	Bettis Atomic Power Laboratory
IN	Idaho National Laboratory
KA	Knolls Atomic Power Laboratory - Schenectady
KN	Knolls Atomic Power Laboratory - Nuclear Fuel Services
LA	Los Alamos National Laboratory
LB	Lawrence Berkeley National Laboratory
LL	Lawrence Livermore National Laboratory
MC	U.S. Army Materiel Command
ND	Nuclear Radiation Development Site
NT	Nevada National Security Site
OR	Oak Ridge National Laboratory
PA	Paducah Gaseous Diffusion Plant
RL	Hanford (Richland) Site
RP	Hanford (River Protection) Site
SA	Sandia National Laboratories
SR	Savannah River Site
WV	West Valley Demonstration Project

Table C-1. Crosswalk of ATWIR-2012 to ATWIR-2011 Waste Streams

Site Code	ATWIR-2012 Waste Streams	ATWIR-2011 Waste Streams
AE	AE-T001	AE-T001
AE	AE-T003	AE-T003
AE	AE-T009	AE-T009
AW	AW-5410N	*New Waste Stream*
AW	AW-5649N	*New Waste Stream*
AW	AW-5882N	*New Waste Stream*
AW	AW-IN-TRA-BE-01	AW-IN-TRA-BE-01
AW	AW-N027.531	AW-N027.531
AW	AW-T031.1322	AW-T031.1322
AW	AW-T033.1325	AW-T033.1325
AW	AW-W018	AW-W018
AW	AW-W019	AW-W019
AW	AW-W020.13	AW-W020.13
BL	BL-Parks	BL-Parks
BL	BL-Parks-A	BL-Parks-A
BT	BT-T001	BT-T001
IN	IN-AE-AGHC-02	IN-AE-AGHC-02
IN	IN-AE-AGHC-02T	IN-AE-AGHC-02
IN	IN-AECHDM-PK	AE-T001
IN	IN-BN004	IN-BN004
IN	IN-BN050	IN-BN050
IN	IN-BN090	IN-BN090
IN	IN-BN095	IN-BN095
IN	IN-BN203	IN-BN203
IN	IN-BN204	IN-BN204
IN	IN-BN222	IN-BN222
IN	IN-BN290	IN-BN290
IN	IN-BN311	IN-BN311
IN	IN-BN375	IN-BN375
IN	IN-BN409	IN-BN409
IN	IN-BN421	IN-BN421
IN	IN-BN425	IN-BN425
IN	IN-BN430	IN-BN430
IN	IN-BN431	IN-BN431
IN	IN-BN432	IN-BN432, IN-W317R
IN	IN-BN510	IN-BN510
IN	IN-BN510.1	IN-BN510.1, IN-W169R, IN-W197R, IN-W198R, IN-W208R, IN-W243R, IN-W245R, IN-W247R, IN-W252R, IN-W254R, IN-W294R, IN-W296R, IN-W298R, IN-W364R, IN-W365R

Table C-1. Crosswalk of ATWIR-2012 to ATWIR-2011 Waste Streams
Continued

Site Code	ATWIR-2012 Waste Streams	ATWIR-2011 Waste Streams
IN	IN-BN600	*New Waste Stream*
IN	IN-BN806	IN-BN806
IN	IN-BN811	IN-BN811
IN	IN-BN817	IN-BN817
IN	IN-BN823	IN-BN823
IN	IN-BN835	IN-BN835
IN	IN-BN836	IN-BN836
IN	IN-BN842	IN-BN842
IN	IN-BN976	IN-BN976
IN	IN-BN978	IN-BN978
IN	IN-BNINW216	IN-BNINW216, IN-W216R, IN-W228R
IN	IN-BNINW218	IN-BNINW218
IN	IN-ID-BTO-030	IN-ID-BTO-030
IN	IN-ID-EBR-S5000	IN-ID-EBR-S5000
IN	IN-ID-INL-152	IN-ID-INL-152
IN	IN-ID-INL-152M	IN-ID-INL-152M
IN	IN-ID-MFC-S5400	*New Waste Stream*
IN	IN-ID-MFC-SOLID	IN-ID-MFC-SOLID
IN	IN-ID-RF-S3114	IN-ID-RF-S3114
IN	IN-ID-RF-S3150-A	IN-ID-RF-S3150-A
IN	IN-ID-RF-S5126	IN-ID-RF-S5126
IN	IN-ID-RF-S5300-A	IN-ID-RF-S5300-A
IN	IN-ID-SA-T001	IN-ID-SA-T001
IN	IN-ID-SDA-Debris	IN-ID-SDA-Debris
IN	IN-ID-SDA-Sludge	IN-ID-SDA-Sludge
IN	IN-ID-SDA-Soil	IN-ID-SDA-Soil
IN	IN-ID-SNL-HCF-S5400	IN-ID-SNL-HCF-S5400
IN	IN-JH826CH	*New Waste Stream*
IN	IN-MFC-S5490	IN-MFC-S5490
IN	IN-NRF-SPC	IN-NRF-SPC
IN	IN-NRF-SPC-103	IN-NRF-SPC-103
IN	IN-SBW-01A	IN-SBW-01A
IN	IN-SBW-01B	IN-SBW-01B
IN	IN-W139	*New Waste Stream*
IN	IN-W170	IN-W170
IN	IN-W171	IN-W171
IN	IN-W259	IN-W259
IN	IN-W269	IN-W269
IN	IN-W283	IN-W283, IN-W283R
IN	IN-W287	IN-W287
IN	IN-W322	IN-W322

Table C-1. Crosswalk of ATWIR-2012 to ATWIR-2011 Waste Streams
Continued

Site Code	ATWIR-2012 Waste Streams	ATWIR-2011 Waste Streams
IN	IN-W323	IN-W323
IN	IN-W337	IN-W337
IN	IN-W338	IN-W338
IN	IN-W339	IN-W339
IN	IN-W342R	IN-W342R
IN	IN-W345	IN-W345
IN	IN-W347	IN-W347
IN	IN-W350	IN-W350
IN	IN-W351	IN-W351
IN	IN-W358	IN-W358
IN	IN-W359R	IN-W359R
IN	IN-W360	IN-W360R
KA	KA-T001	KA-T001
KA	KA-W016	KA-W016
KN	KN-B234TRU	KN-B234TRU
LA	LA-CIN01.001	LA-CIN01.001
LA	LA-CIN02.001	LA-CIN02.001, LA-TA-50-18
LA	LA-CIN03.001	LA-CIN03.001
LA	LA-LAMHD02238	*New Waste Stream*
LA	LA-LAMHD04001	*New Waste Stream*
LA	LA-LAMIN04S	LA-LAMIN04S
LA	LA-LAMSG04001	*New Waste Stream*
LA	LA-LANHD01	LA-LANHD01
LA	LA-LANHD02238	LA-LANHD02238
LA	LA-LANIN03NC	LA-LANIN03NC
LA	LA-MHD01.001	LA-MHD01.001, LA-TA-55-19, LA-TA-55-30
LA	LA-MHD03.001	LA-MHD03.001, LA-TA-03-40, LA-TA-03-42
LA	LA-MHD04.001	LA-MHD04.001
LA	LA-MHD05-ITRI.001	LA-MHD05-ITRI.001
LA	LA-MHD08.001	LA-MHD08.001
LA	LA-MHD09.001	LA-MHD09.001
LA	LA-MIN02-V.001	LA-MIN02-V.001
LA	LA-MIN03-NC.001	LA-MIN03-NC.001
LA	LA-MIN04-S.001	LA-MHD01.001, LA-MIN04-S.001
LA	LA-MSG04.001	LA-MSG04.001
LA	LA-OS-00-01.001	LA-OS-00-01.001
LA	LA-OS-00-04	*New Waste Stream*
LA	LA-TA-00-01	LA-TA-00-01
LA	LA-TA-00-03	LA-TA-00-03
LA	LA-TA-00-04	LA-TA-00-04
LA	LA-TA-03-01	LA-TA-03-01

Table C-1. Crosswalk of ATWIR-2012 to ATWIR-2011 Waste Streams
Continued

Site Code	ATWIR-2012 Waste Streams	ATWIR-2011 Waste Streams
LA	LA-TA-03-09	*New Waste Stream*
LA	LA-TA-03-10	LA-TA-03-10
LA	LA-TA-03-12	LA-TA-03-12
LA	LA-TA-03-14	LA-TA-03-14
LA	LA-TA-03-17	LA-TA-03-17
LA	LA-TA-03-21	LA-TA-03-21
LA	LA-TA-03-23	LA-TA-03-23
LA	LA-TA-03-27	LA-TA-03-27
LA	LA-TA-03-28	LA-TA-03-28
LA	LA-TA-03-30	LA-TA-03-30
LA	LA-TA-03-33	LA-TA-03-33
LA	LA-TA-03-34	LA-TA-03-34
LA	LA-TA-03-42	LA-TA-03-42
LA	LA-TA-21-01	*New Waste Stream*
LA	LA-TA-21-05	LA-TA-21-05
LA	LA-TA-21-06	LA-TA-21-06
LA	LA-TA-21-07	LA-TA-21-07
LA	LA-TA-21-08	LA-TA-21-08
LA	LA-TA-21-09	LA-TA-21-09
LA	LA-TA-21-11	LA-TA-21-11
LA	LA-TA-21-12	LA-TA-21-12
LA	LA-TA-21-13	LA-TA-21-13
LA	LA-TA-21-15	LA-TA-21-15
LA	LA-TA-21-16	LA-TA-21-16
LA	LA-TA-21-17	LA-TA-21-17
LA	LA-TA-50-12	LA-TA-50-12
LA	LA-TA-50-15	LA-TA-50-15
LA	LA-TA-50-18	LA-TA-50-18
LA	LA-TA-50-19	LA-TA-50-19
LA	LA-TA-50-20	LA-TA-50-20
LA	LA-TA-55-14	*New Waste Stream*
LA	LA-TA-55-19	LA-TA-55-19
LA	LA-TA-55-21	LA-TA-55-21
LA	LA-TA-55-30	LA-TA-55-30
LA	LA-TA-55-32	LA-TA-55-32
LA	LA-TA-55-38	LA-TA-55-38
LA	LA-TRU-Empty	LA-TRU-Empty
LB	LB-T001	LB-T001
LB	LB-T002	LB-T002
LL	LL-M001	LL-M001
LL	LL-T004	LL-T004

Table C-1. Crosswalk of ATWIR-2012 to ATWIR-2011 Waste Streams
Continued

Site Code	ATWIR-2012 Waste Streams	ATWIR-2011 Waste Streams
LL	LL-W018-S5100	LL-W018-S5100
LL	LL-W018-SS	LL-W018-SS
LL	LL-W019	LL-W019
ND	ND-T001	ND-T001
ND	ND-T002	ND-T002
NT	NT-JAS-01	NT-JAS-01
NT	NT-W021	NT-W021
OR	OR-CHEM-CH-HET	OR-CHEM-CH-HET
OR	OR-GENR-CH-HET	OR-GENR-CH-HET
OR	OR-GENR-RH-HET	OR-GENR-RH-HET
OR	OR-ISTP-CH-HET	OR-ISTP-CH-HET
OR	OR-ISTP-RH-HET	OR-ISTP-RH-HET
OR	OR-NBL-CH-HET	OR-NBL-CH-HET
OR	OR-NFS-CH-HET	OR-NFS-CH-HET
OR	OR-NFS-CH-HOM	OR-NFS-CH-HOM
OR	OR-NFS-CH-SOIL	OR-NFS-CH-SOIL
OR	OR-PGDP-CH-HET	OR-PGDP-CH-HET
OR	OR-RADP-CH-HET	OR-RADP-CH-HET
OR	OR-RADP-CH-SOILS	OR-RADP-CH-SOILS
OR	OR-RADP-RH-HET	OR-RADP-RH-HET
OR	OR-REDC-CH-HET	OR-REDC-CH-HET
OR	OR-REDC-RH-HET	OR-REDC-RH-HET
OR	OR-RF-CH-HET	OR-RF-CH-HET
OR	OR-RF-CH-HOM	OR-RF-CH-HOM
OR	OR-RF-RH-HET	OR-RF-RH-HET
OR	OR-SWSA-CH-HET	OR-TBD-CH-HET
OR	OR-SWSA-CH-SOIL	OR-RADP-CH-SOILS
OR	OR-TBD-CH-HET	OR-TBD-CH-HET
OR	OR-TBD-RH-HET	OR-TBD-RH-HET
OR	OR-W203	OR-W203
OR	OR-W213-RH-SOILS	OR-W213-RH-SOILS
OR	OR-WSTR-CH-HET	OR-WSTR-CH-HET
OR	OR-Y12-CH-HET	OR-Y12-CH-HET
RL	RL105-01	RL105-01
RL	RL105-03	RL105-03
RL	RL105-08	RL105-08
RL	RL105-09	RL105-09
RL	RL200-01	RL200-01
RL	RL200-02	RL200-02, RLPFP-02
RL	RL201-03	RL201-03
RL	RL202S-01	RL202S-01

Table C-1. Crosswalk of ATWIR-2012 to ATWIR-2011 Waste Streams
Continued

Site Code	ATWIR-2012 Waste Streams	ATWIR-2011 Waste Streams
RL	RL209E-01	RL209E-01
RL	RL209E-08	RL209E-08
RL	RL216Z-02	RL216Z-02
RL	RL221T-01	RL221T-01
RL	RL221U-03	RL221U-01
RL	RL221U-09	RL221U-09
RL	RL222S-01	RL222S-01
RL	RL222S-08	RL222S-08
RL	RL231Z-01	RL231Z-01
RL	RL231Z-03	RL231Z-03
RL	RL233S-01	RL233S-01
RL	RL233S-03	RL233S-03
RL	RL300-01	RL300-01
RL	RL300-03	RL300-03
RL	RL300-08	RL300-08
RL	RL300-11	RL300-11
RL	RL308-01	RL308-01
RL	RL308-03	RL308-01
RL	RL308-08	RL308-08
RL	RL325-01	RL325-01
RL	RL325-03	RL325-03
RL	RL325-08	RL325-08
RL	RL618-01	RL618-01
RL	RL618-08	RL618-08
RL	RLALE-02	RL325-02
RL	RLARG-01	RLARG-01
RL	RLBART-08	RLBART-08
RL	RLBAT-01	RLBAT-01
RL	RLBAT-08	RLBAT-08
RL	RLBET-08	RLBET-08
RL	RLBW-01	RLBW-01
RL	RLBW-03	RLBW-03
RL	RLBW-08	RLBW-08
RL	RLCFF-01	RLCFF-01
RL	RLCFF-03	RLCFF-03
RL	RLCH2-01	RLCH2-01
RL	RLCH2-08	RLCH2-08
RL	RLESG-01	RLESG-01
RL	RLESG-03	RLESG-01
RL	RLESG-08	RLESG-08
RL	RLEXX-01	RLEXX-01

Table C-1. Crosswalk of ATWIR-2012 to ATWIR-2011 Waste Streams
Continued

Site Code	ATWIR-2012 Waste Streams	ATWIR-2011 Waste Streams
RL	RLFFTF-01	RLFFTF-01
RL	RLFFTF-08	RLFFTF-08
RL	RLGEV-01	RLGEV-01
RL	RLGEV-03	RLGEV-03
RL	RLGEV-08	RLGEV-08
RL	RLHAN-01	RLHAN-01
RL	RLHAN-08	RLHAN-08
RL	RLIAEA-03	RLIAEA-01
RL	RLMLB-08	RLMLB-08
RL	RLMLL-01	RLMLL-01
RL	RLP11-01	*New Waste Stream*
RL	RLPFP-01	RLPFP-01
RL	RLPFP-03	RLPFP-03
RL	RLPFP-04	RLPFP-04
RL	RLPFP-08	RLPFP-08
RL	RLPFP-10	RLPFP-10
RL	RLPRC-01	RLPRC-01
RL	RLPURX-01	RLPURX-01
RL	RLPURX-08	RLPURX-08
RL	RLRFET-01	RLRFET-01
RL	RLSAN-01	RLSAN-01
RL	RLSWO-01	RLSWO-01, RLSWO-08
RL	RLWAR-01	RLWAR-01
RL	RLWAR-03	RLWAR-03
RL	RLWTP-08	RLWTP-08
RP	RP-TFC001	RP-TFC001
RP	RP-W754	RP-W754
RP	RP-W755	RP-W755
SA	SA-W135	SA-W135
SA	SA-W136	SA-W136
SA	SA-W137	*New Waste Stream*
SA	SA-W138M	*New Waste Stream*
SR	SR-221H-PuOx	*New Waste Stream*
SR	SR-AGNS-HET	SR-AGNS-HET
SR	SR-AGNS-HOM	SR-AGNS-HOM
SR	SR-BCLDP-HET	SR-BCLDP-HET
SR	SR-BCLDP.003.001	*New Waste Stream*
SR	SR-BCLDP.004.004	*New Waste Stream*
SR	SR-KAC-HET	SR-KAC-HET
SR	SR-LA-PAD1	SR-LA-PAD1
SR	SR-MD-HET	SR-MD-HET

Table C-1. Crosswalk of ATWIR-2012 to ATWIR-2011 Waste Streams
Continued

Site Code	ATWIR-2012 Waste Streams	ATWIR-2011 Waste Streams
SR	SR-MD-HOM-C	SR-MD-HOM-C
SR	SR-MD-PAD1	SR-MD-PAD1
SR	SR-MD-SOIL	SR-MD-SOIL
SR	SR-NIST-HET	SR-NIST-HET
SR	SR-RH-221H.01	SR-RH-221H.01
SR	SR-RH-221H.02	SR-RH-221H.02
SR	SR-RH-235F.01	SR-RH-235F.01
SR	SR-RH-772F.01	SR-RH-772F.01
SR	SR-RH-773A.01	SR-RH-773A.01
SR	SR-RH-FBL.01	SR-RH-FBL.01
SR	SR-RH-MNDPAD1.01	SR-RH-MNDPAD1.01
SR	SR-RH-SDD.01	SR-RH-SDD.01
SR	SR-RH-SWD.01	SR-RH-SWD.01
SR	SR-SDD-HET-A	SR-SDD-HET-A
SR	SR-SDD-HET-B	SR-SDD-HET-B
SR	SR-SDD-HOM-A	SR-SDD-HOM-A
SR	SR-SDD-HOM-B	SR-SDD-HOM-B, SR-SDD-HOM-C
SR	SR-SWMF-HET-A	SR-SWMF-HET-A
SR	SR-SWMF-HET-B	SR-W027-643G-HET
SR	SR-SWMF-SOIL	SR-SWMF-SOIL
SR	SR-T001-WSB-1	SR-T001-WSB-1
SR	SR-W026-221F-HEPA	SR-W026-221F-HEPA
SR	SR-W026-221F-HET	SR-W026-221F-HET
SR	SR-W026-221F-HET-A	SR-W026-221F-HET-A
SR	SR-W026-221F-HOM	SR-W026-221F-HOM
SR	SR-W026-772F-HET	SR-W026-772F-HET
SR	SR-W026-DWPF-HET	SR-W026-DWPF-HET
SR	SR-W026-MFFF-1	SR-W026-MFFF-1
SR	SR-W026-WSB-2	SR-W026-WSB-2
SR	SR-W027-221F-HET-A	SR-W027-221F-HET-A, SR-W027-221F-HET-C-D, SR-W027-221F-HET-E
SR	SR-W027-221H-HEPA	SR-W027-221H-HEPA
SR	SR-W027-221H-HET	SR-W027-221H-HET
SR	SR-W027-221H-HET-C	SR-W027-221H-HET-B, SR-W027-221H-HET-C
SR	SR-W027-221H-HOM	SR-W027-221H-HOM
SR	SR-W027-235F-HEPA	SR-W027-235F-HEPA
SR	SR-W027-235F-HET	SR-W027-235F-HET
SR	SR-W027-235F-HOM	SR-W027-235F-HOM
SR	SR-W027-235F/221H-HET	SR-HBL-235F-HET

Table C-1. Crosswalk of ATWIR-2012 to ATWIR-2011 Waste Streams
Continued

Site Code	ATWIR-2012 Waste Streams	ATWIR-2011 Waste Streams
SR	SR-W027-321-322M-HET	SR-W027-321-322M-HET
SR	SR-W027-321M-HOM	SR-W027-321-322M-HET
SR	SR-W027-773A-HET	SR-W027-773A-HEPA, SR-W027-773A-HET
SR	SR-W027-773A-HET-CLAS	SR-W027-773A-HET-CLAS
SR	SR-W027-773A-HOM	*New Waste Stream*
SR	SR-W027-776A-HET	SR-W027-776A-HET
SR	SR-W027-FB-Pre86-C	SR-W027-FB-Pre86-C
SR	SR-W027-HBL-Box	SR-W027-HBL-Box
SR	SR-W027-UNK	SR-W027-UNK
WV	WV-M010a	WV-M010a
WV	WV-T004	WV-T004
WV	WV-T006a	WV-T006a
WV	WV-T006b	WV-T006b
WV	WV-T017b	WV-T017b
WV	WV-W024a	WV-W024a
WV	WV-W024b	WV-W024b
WV	WV-Z001	WV-Z001

Data Source: CID Data Version D.11.00 LANL-CO 2012. Note: This table contains data for WIPP-bound and potential waste streams only; it does not include data for emplaced waste streams.

Table C-2. Crosswalk of ATWIR-2011 to ATWIR-2012 Waste Streams

Site Code	ATWIR-2011 Waste Streams	ATWIR-2012 Waste Streams
AE	AE-T001	AE-T001, IN-AECHDM-PK
AE	AE-T003	AE-T003
AE	AE-T009	AE-T009
AW	AW-IN-TRA-BE-01	AW-IN-TRA-BE-01
AW	AW-N027.531	AW-N027.531
AW	AW-T031.1322	AW-T031.1322
AW	AW-T033.1325	AW-T033.1325
AW	AW-W018	AW-W018
AW	AW-W019	AW-W019
AW	AW-W020.13	AW-W020.13
BL	BL-Parks	BL-Parks
BL	BL-Parks-A	BL-Parks-A
BT	BT-T001	BT-T001
IN	IN-AE-AGHC-02	IN-AE-AGHC-02, IN-AE-AGHC-02T
IN	IN-BN004	IN-BN004
IN	IN-BN005	*Deleted Waste Stream – Determined to be Mixed Low-Level Waste*
IN	IN-BN050	IN-BN050
IN	IN-BN090	IN-BN090
IN	IN-BN095	IN-BN095
IN	IN-BN203	IN-BN203
IN	IN-BN204	IN-BN204
IN	IN-BN222	IN-BN222
IN	IN-BN290	IN-BN290
IN	IN-BN311	IN-BN311
IN	IN-BN375	IN-BN375
IN	IN-BN409	IN-BN409
IN	IN-BN421	IN-BN421
IN	IN-BN425	IN-BN425
IN	IN-BN430	IN-BN430
IN	IN-BN431	IN-BN431
IN	IN-BN432	IN-BN432
IN	IN-BN510	IN-BN510
IN	IN-BN510.1	IN-BN510.1
IN	IN-BN806	IN-BN806
IN	IN-BN811	IN-BN811
IN	IN-BN817	IN-BN817
IN	IN-BN823	IN-BN823
IN	IN-BN835	IN-BN835
IN	IN-BN836	IN-BN836

Table C-2. Crosswalk of ATWIR-2011 to ATWIR-2012 Waste Streams
Continued

Site Code	ATWIR-2011 Waste Streams	ATWIR-2012 Waste Streams
IN	IN-BN842	IN-BN842
IN	IN-BN976	IN-BN976
IN	IN-BN978	IN-BN978
IN	IN-BNINW216	IN-BNINW216
IN	IN-BNINW218	IN-BNINW218
IN	IN-ID-BTO-030	IN-ID-BTO-030
IN	IN-ID-EBR-S5000	IN-ID-EBR-S5000
IN	IN-ID-INL-152	IN-ID-INL-152
IN	IN-ID-INL-152M	IN-ID-INL-152M
IN	IN-ID-MFC-SOLID	IN-ID-MFC-SOLID
IN	IN-ID-RF-S3114	IN-ID-RF-S3114
IN	IN-ID-RF-S3150-A	IN-ID-RF-S3150-A
IN	IN-ID-RF-S5100-A	*Deleted Waste Stream – Shipped to WIPP.*
IN	IN-ID-RF-S5126	IN-ID-RF-S5126
IN	IN-ID-RF-S5300-A	IN-ID-RF-S5300-A
IN	IN-ID-RTC-S5000	*Deleted Waste Stream - Determined to be LLW or MLLW*
IN	IN-ID-SA-T001	IN-ID-SA-T001
IN	IN-ID-SDA-Debris	IN-ID-SDA-Debris
IN	IN-ID-SDA-Sludge	IN-ID-SDA-Sludge
IN	IN-ID-SDA-Soil	IN-ID-SDA-Soil
IN	IN-ID-SNL-HCF-S5400	IN-ID-SNL-HCF-S5400
IN	IN-INTEC-SFS-01	*Deleted Waste Stream - Shipped to WIPP*
IN	IN-LL-M001-S5400	*Deleted Waste Stream - Shipped to WIPP*
IN	IN-LL-T004-S3141	*Deleted Waste Stream - Shipped to WIPP*
IN	IN-LL-W019-S3900	*Deleted Waste Stream - Shipped to WIPP*
IN	IN-MFC-S5490	IN-MFC-S5490
IN	IN-NRF-153	*Deleted Waste Stream - Shipped to WIPP*
IN	IN-NRF-SPC	IN-NRF-SPC
IN	IN-NRF-SPC-103	IN-NRF-SPC-103
IN	IN-SBW-01A	IN-SBW-01A
IN	IN-SBW-01B	IN-SBW-01B
IN	IN-TRA-150	*Deleted Waste Stream - Determined to be LLW or MLLW*
IN	IN-W169R	IN-BN510.1
IN	IN-W170	IN-W170
IN	IN-W171	IN-W171
IN	IN-W197R	IN-BN510.1
IN	IN-W198R	IN-BN510.1
IN	IN-W208R	IN-BN510.1
IN	IN-W216R	IN-BNINW216
IN	IN-W228R	IN-BNINW216
IN	IN-W243R	IN-BN510.1

Table C-2. Crosswalk of ATWIR-2011 to ATWIR-2012 Waste Streams
Continued

Site Code	ATWIR-2011 Waste Streams	ATWIR-2012 Waste Streams
IN	IN-W245R	IN-BN510.1
IN	IN-W247R	IN-BN510.1
IN	IN-W252R	IN-BN510.1
IN	IN-W254R	IN-BN510.1
IN	IN-W259	IN-W259
IN	IN-W269	IN-W269
IN	IN-W283	IN-W283
IN	IN-W283R	IN-W283
IN	IN-W287	IN-W287
IN	IN-W294R	IN-BN510.1
IN	IN-W296R	IN-BN510.1
IN	IN-W298R	IN-BN510.1
IN	IN-W317R	IN-BN432
IN	IN-W322	IN-W322
IN	IN-W323	IN-W323
IN	IN-W337	IN-W337
IN	IN-W338	IN-W338
IN	IN-W339	IN-W339
IN	IN-W342R	IN-W342R
IN	IN-W345	IN-W345
IN	IN-W347	IN-W347
IN	IN-W350	IN-W350
IN	IN-W351	IN-W351
IN	IN-W358	IN-W358
IN	IN-W359R	IN-W359R
IN	IN-W360R	IN-W360
IN	IN-W364R	IN-BN510.1
IN	IN-W365R	IN-BN510.1
KA	KA-T001	KA-T001
KA	KA-W016	KA-W016
KN	KN-B234TRU	KN-B234TRU
KN	KN-B234TRU_SS	*Deleted Waste Stream – Change in process – will not be generated*
LA	LA-CIN01.001	LA-CIN01.001
LA	LA-CIN02.001	LA-CIN02.001
LA	LA-CIN03.001	LA-CIN03.001
LA	LA-LAMIN04S	LA-LAMIN04S
LA	LA-LANHD01	LA-LANHD01
LA	LA-LANHD02238	LA-LANHD02238
LA	LA-LANIN03NC	LA-LANIN03NC
LA	LA-MHD01.001	LA-MHD01.001, LA-MIN04-S.001

Table C-2. Crosswalk of ATWIR-2011 to ATWIR-2012 Waste Streams
Continued

Site Code	ATWIR-2011 Waste Streams	ATWIR-2012 Waste Streams
LA	LA-MHD02-PTX.001	*Deleted Waste Stream - Shipped to WIPP*
LA	LA-MHD03.001	LA-MHD03.001
LA	LA-MHD04.001	LA-MHD04.001
LA	LA-MHD05-ITRI.001	LA-MHD05-ITRI.001
LA	LA-MHD08.001	LA-MHD08.001
LA	LA-MHD09.001	LA-MHD09.001
LA	LA-MIN02-V.001	LA-MIN02-V.001
LA	LA-MIN03-NC.001	LA-MIN03-NC.001
LA	LA-MIN04-S.001	LA-MIN04-S.001
LA	LA-MSG04.001	LA-MSG04.001
LA	LA-OS-00-01.001	LA-OS-00-01.001
LA	LA-OS-00-03	*Deleted Waste Stream - Shipped to WIPP*
LA	LA-TA-00-01	LA-TA-00-01
LA	LA-TA-00-03	LA-TA-00-03
LA	LA-TA-00-04	LA-TA-00-04
LA	LA-TA-03-01	LA-TA-03-01
LA	LA-TA-03-10	LA-TA-03-10
LA	LA-TA-03-12	LA-TA-03-12
LA	LA-TA-03-14	LA-TA-03-14
LA	LA-TA-03-17	LA-TA-03-17
LA	LA-TA-03-21	LA-TA-03-21
LA	LA-TA-03-23	LA-TA-03-23
LA	LA-TA-03-27	LA-TA-03-27
LA	LA-TA-03-28	LA-TA-03-28
LA	LA-TA-03-30	LA-TA-03-30
LA	LA-TA-03-33	LA-TA-03-33
LA	LA-TA-03-34	LA-TA-03-34
LA	LA-TA-03-40	LA-MHD03.001
LA	LA-TA-03-42	LA-MHD03.001, LA-TA-03-42
LA	LA-TA-21-05	LA-TA-21-05
LA	LA-TA-21-06	LA-TA-21-06
LA	LA-TA-21-07	LA-TA-21-07
LA	LA-TA-21-08	LA-TA-21-08
LA	LA-TA-21-09	LA-TA-21-09
LA	LA-TA-21-11	LA-TA-21-11
LA	LA-TA-21-12	LA-TA-21-12
LA	LA-TA-21-13	LA-TA-21-13
LA	LA-TA-21-15	LA-TA-21-15
LA	LA-TA-21-16	LA-TA-21-16
LA	LA-TA-21-17	LA-TA-21-17
LA	LA-TA-50-12	LA-TA-50-12

Table C-2. Crosswalk of ATWIR-2011 to ATWIR-2012 Waste Streams
Continued

Site Code	ATWIR-2011 Waste Streams	ATWIR-2012 Waste Streams
LA	LA-TA-50-15	LA-TA-50-15
LA	LA-TA-50-18	LA-CIN02.001, LA-TA-50-18
LA	LA-TA-50-19	LA-TA-50-19
LA	LA-TA-50-20	LA-TA-50-20
LA	LA-TA-55-19	LA-MHD01.001, LA-TA-55-19
LA	LA-TA-55-21	LA-TA-55-21
LA	LA-TA-55-30	LA-MHD01.001, LA-TA-55-30
LA	LA-TA-55-32	LA-TA-55-32
LA	LA-TA-55-38	LA-TA-55-38
LA	LA-TRU-Empty	LA-TRU-Empty
LB	LB-T001	LB-T001
LB	LB-T002	LB-T002
LB	LB-T003	*Deleted Waste Stream - Shipped to WIPP*
LB	LB-T004	*Deleted Waste Stream - Shipped to WIPP*
LL	LL-M001	LL-M001
LL	LL-T004	LL-T004
LL	LL-W018-S5100	LL-W018-S5100
LL	LL-W018-SS	LL-W018-SS
LL	LL-W019	LL-W019
MC	MC-W001	*Deleted Waste Stream – Disposed by Joint Munitions Command*
ND	ND-T001	ND-T001
ND	ND-T002	ND-T002
NT	NT-JAS-01	NT-JAS-01
NT	NT-W021	NT-W021
OR	OR-CHEM-CH-HET	OR-CHEM-CH-HET
OR	OR-GENR-CH-HET	OR-GENR-CH-HET
OR	OR-GENR-RH-HET	OR-GENR-RH-HET
OR	OR-ISTP-CH-HET	OR-ISTP-CH-HET
OR	OR-ISTP-RH-HET	OR-ISTP-RH-HET
OR	OR-NBL-CH-HET	OR-NBL-CH-HET
OR	OR-NFS-CH-HET	OR-NFS-CH-HET
OR	OR-NFS-CH-HOM	OR-NFS-CH-HOM
OR	OR-NFS-CH-SOIL	OR-NFS-CH-SOIL
OR	OR-PGDP-CH-HET	OR-PGDP-CH-HET
OR	OR-RADP-CH-HET	OR-RADP-CH-HET
OR	OR-RADP-CH-SOILS	OR-RADP-CH-SOILS, OR-SWSA-CH-SOIL
OR	OR-RADP-RH-HET	OR-RADP-RH-HET
OR	OR-REDC-CH-HET	OR-REDC-CH-HET
OR	OR-REDC-RH-HET	OR-REDC-RH-HET
OR	OR-RF-CH-HET	OR-RF-CH-HET

Table C-2. Crosswalk of ATWIR-2011 to ATWIR-2012 Waste Streams
Continued

Site Code	ATWIR-2011 Waste Streams	ATWIR-2012 Waste Streams
OR	OR-RF-CH-HOM	OR-RF-CH-HOM
OR	OR-RF-RH-HET	OR-RF-RH-HET
OR	OR-TBD-CH-HET	OR-SWSA-CH-HET, OR-TBD-CH-HET
OR	OR-TBD-RH-HET	OR-TBD-RH-HET
OR	OR-W203	OR-W203
OR	OR-W213-RH-SOILS	OR-W213-RH-SOILS
OR	OR-WSTR-CH-HET	OR-WSTR-CH-HET
OR	OR-Y12-CH-HET	OR-Y12-CH-HET
PA	PA-A015	*Deleted Waste Stream - Determined to be LLW*
PA	PA-W014	*Deleted Waste Stream - Determined to be LLW*
RL	RL105-01	RL105-01
RL	RL105-03	RL105-03
RL	RL105-08	RL105-08
RL	RL105-09	RL105-09
RL	RL200-01	RL200-01
RL	RL200-02	RL200-02
RL	RL201-03	RL201-03
RL	RL202S-01	RL202S-01
RL	RL209E-01	RL209E-01
RL	RL209E-08	RL209E-08
RL	RL216Z-02	RL216Z-02
RL	RL221T-01	RL221T-01
RL	RL221U-01	RL221U-03
RL	RL221U-09	RL221U-09
RL	RL222S-01	RL222S-01
RL	RL222S-08	RL222S-08
RL	RL231Z-01	RL231Z-01
RL	RL231Z-03	RL231Z-03
RL	RL233S-01	RL233S-01
RL	RL233S-03	RL233S-03
RL	RL300-01	RL300-01
RL	RL300-03	RL300-03
RL	RL300-08	RL300-08
RL	RL300-11	RL300-11
RL	RL308-01	RL308-01, RL308-03
RL	RL308-08	RL308-08
RL	RL325-01	RL325-01
RL	RL325-02	RLALE-02
RL	RL325-03	RL325-03
RL	RL325-08	RL325-08
RL	RL618-01	RL618-01

Table C-2. Crosswalk of ATWIR-2011 to ATWIR-2012 Waste Streams
Continued

Site Code	ATWIR-2011 Waste Streams	ATWIR-2012 Waste Streams
RL	RL618-08	RL618-08
RL	RLARG-01	RLARG-01
RL	RLBART-08	RLBART-08
RL	RLBAT-01	RLBAT-01
RL	RLBAT-08	RLBAT-08
RL	RLBET-08	RLBET-08
RL	RLBW-01	RLBW-01
RL	RLBW-03	RLBW-03
RL	RLBW-08	RLBW-08
RL	RLCFF-01	RLCFF-01
RL	RLCFF-03	RLCFF-03
RL	RLCH2-01	RLCH2-01
RL	RLCH2-08	RLCH2-08
RL	RLESG-01	RLESG-01, RLESG-03
RL	RLESG-08	RLESG-08
RL	RLEXX-01	RLEXX-01
RL	RLFFTF-01	RLFFTF-01
RL	RLFFTF-08	RLFFTF-08
RL	RLGEV-01	RLGEV-01
RL	RLGEV-03	RLGEV-03
RL	RLGEV-08	RLGEV-08
RL	RLHAN-01	RLHAN-01
RL	RLHAN-08	RLHAN-08
RL	RLIAEA-01	RLIAEA-03
RL	RLMLB-08	RLMLB-08
RL	RLMLL-01	RLMLL-01
RL	RLPFP-01	RLPFP-01
RL	RLPFP-02	RL200-02
RL	RLPFP-03	RLPFP-03
RL	RLPFP-04	RLPFP-04
RL	RLPFP-08	RLPFP-08
RL	RLPFP-10	RLPFP-10
RL	RLPRC-01	RLPRC-01
RL	RLPURX-01	RLPURX-01
RL	RLPURX-08	RLPURX-08
RL	RLRFET-01	RLRFET-01
RL	RLSAN-01	RLSAN-01
RL	RLSWO-01	RLSWO-01
RL	RLSWO-08	RLSWO-01
RL	RLWAR-01	RLWAR-01
RL	RLWAR-03	RLWAR-03

Table C-2. Crosswalk of ATWIR-2011 to ATWIR-2012 Waste Streams
Continued

Site Code	ATWIR-2011 Waste Streams	ATWIR-2012 Waste Streams
RL	RLWTP-08	RLWTP-08
RP	RP-TFC001	RP-TFC001
RP	RP-W754	RP-W754
RP	RP-W755	RP-W755
SA	SA-T001	*Deleted Waste Stream - Shipped to INL, then to WIPP*
SA	SA-W134	*Deleted Waste Stream - Shipped to INL, then to WIPP*
SA	SA-W134M	*Deleted Waste Stream - Shipped to INL, then to WIPP*
SA	SA-W135	SA-W135
SA	SA-W136	SA-W136
SR	SR-AGNS-HET	SR-AGNS-HET
SR	SR-AGNS-HOM	SR-AGNS-HOM
SR	SR-BCLDP-HET	SR-BCLDP-HET
SR	SR-HBL-235F-HET	SR-W027-235F/221H-HET
SR	SR-KAC-HET	SR-KAC-HET
SR	SR-LA-PAD1	SR-LA-PAD1
SR	SR-MD-HET	SR-MD-HET
SR	SR-MD-HOM-A	*Deleted Waste Stream – Shipped to WIPP*
SR	SR-MD-HOM-C	SR-MD-HOM-C
SR	SR-MD-PAD1	SR-MD-PAD1
SR	SR-MD-SOIL	SR-MD-SOIL
SR	SR-NIST-HET	SR-NIST-HET
SR	SR-RH-221H.01	SR-RH-221H.01
SR	SR-RH-221H.02	SR-RH-221H.02
SR	SR-RH-235F.01	SR-RH-235F.01
SR	SR-RH-772F.01	SR-RH-772F.01
SR	SR-RH-773A.01	SR-RH-773A.01
SR	SR-RH-FBL.01	SR-RH-FBL.01
SR	SR-RH-FTF.01	*Deleted Waste Stream - Determined to be LLW*
SR	SR-RH-MNDPAD1.01	SR-RH-MNDPAD1.01
SR	SR-RH-SDD.01	SR-RH-SDD.01
SR	SR-RH-SWD.01	SR-RH-SWD.01
SR	SR-RL-BCLDP.002	*Deleted Waste Stream – Shipped to WIPP*
SR	SR-SDD-HET-A	SR-SDD-HET-A
SR	SR-SDD-HET-B	SR-SDD-HET-B
SR	SR-SDD-HOM-A	SR-SDD-HOM-A
SR	SR-SDD-HOM-B	SR-SDD-HOM-B
SR	SR-SDD-HOM-C	SR-SDD-HOM-B
SR	SR-SWMF-HET-A	SR-SWMF-HET-A
SR	SR-SWMF-SOIL	SR-SWMF-SOIL
SR	SR-T001-WSB-1	SR-T001-WSB-1
SR	SR-W026-221F-HEPA	SR-W026-221F-HEPA

Table C-2. Crosswalk of ATWIR-2011 to ATWIR-2012 Waste Streams
Continued

Site Code	ATWIR-2011 Waste Streams	ATWIR-2012 Waste Streams
SR	SR-W026-221F-HET	SR-W026-221F-HET
SR	SR-W026-221F-HET-A	SR-W026-221F-HET-A
SR	SR-W026-221F-HOM	SR-W026-221F-HOM
SR	SR-W026-772F-HET	SR-W026-772F-HET
SR	SR-W026-CIF-HOM	*Deleted Waste Stream - Determined to be LLW*
SR	SR-W026-DWPF-HET	SR-W026-DWPF-HET
SR	SR-W026-MFFF-1	SR-W026-MFFF-1
SR	SR-W026-PDCF-1	*Deleted Waste Stream - Project was cancelled*
SR	SR-W026-WSB-2	SR-W026-WSB-2
SR	SR-W027-221F-HET-A	SR-W027-221F-HET-A
SR	SR-W027-221F-HET-C-D	SR-W027-221F-HET-A
SR	SR-W027-221F-HET-E	SR-W027-221F-HET-A
SR	SR-W027-221H-HEPA	SR-W027-221H-HEPA
SR	SR-W027-221H-HET	SR-W027-221H-HET
SR	SR-W027-221H-HET-B	SR-W027-221H-HET-C
SR	SR-W027-221H-HET-C	SR-W027-221H-HET-C
SR	SR-W027-221H-HOM	SR-W027-221H-HOM
SR	SR-W027-235F-HEPA	SR-W027-235F-HEPA
SR	SR-W027-235F-HET	SR-W027-235F-HET
SR	SR-W027-235F-HOM	SR-W027-235F-HOM
SR	SR-W027-321-322M-HET	SR-W027-321-322M-HET, SR-W027-321M-HOM
SR	SR-W027-643G-HET	SR-SWMF-HET-B
SR	SR-W027-773A-HEPA	SR-W027-773A-HET
SR	SR-W027-773A-HET	SR-W027-773A-HET
SR	SR-W027-773A-HET-CLAS	SR-W027-773A-HET-CLAS
SR	SR-W027-776A-HET	SR-W027-776A-HET
SR	SR-W027-FB-Pre86-C	SR-W027-FB-Pre86-C
SR	SR-W027-HBL-Box	SR-W027-HBL-Box
SR	SR-W027-UNK	SR-W027-UNK
WV	WV-M010a	WV-M010a
WV	WV-T004	WV-T004
WV	WV-T006a	WV-T006a
WV	WV-T006b	WV-T006b
WV	WV-T017b	WV-T017b
WV	WV-W024a	WV-W024a
WV	WV-W024b	WV-W024b
WV	WV-Z001	WV-Z001

Data Source: CID Data Version D.11.00 LANL-CO 2012. Note: This table contains data for WIPP-bound and potential waste streams only; it does not include data for emplaced waste streams.

APPENDIX D DOE POTENTIAL WASTE SCREENING MEMORANDUM

Department of Energy
Carlsbad Field Office
P. O. Box 3090
Carlsbad, New Mexico 88221

March 29, 2010

Mr. Ned Elkins, Manager
Los Alamos National Laboratory - Carlsbad Operations
115 N. Main
Carlsbad, NM 88220

Subject: TRU Waste Inventory Screening Criteria Guidance

Dear Mr. Elkins:

The Department of Energy Carlsbad Field Office (CBFO), in the enclosed memorandum, is providing guidance on the criteria to be used to screen transuranic (TRU) waste streams for exclusion from the Waste Isolation Pilot Plant (WIPP)-bound inventory in upcoming Annual TRU Waste Inventory Reports. This guidance will stay in effect until Los Alamos National Laboratory – Carlsbad Operations is formally notified otherwise by CBFO.

If you have any questions regarding this guidance please notify me at (575) 234-7457.

Sincerely,

Russ Patterson
Compliance Certification Manager

Enclosure

cc: w/enclosure

C. Fesmire, CBFO	*ED
S. McCauslin, CBFO	ED
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*ED denotes electronic distribution

INV-1004-01-01-01

CBFO:ORC:RLP:MDA:10-0945:UFC 5822.00

Screening Memorandum
March 17, 2010

This screening memo describes criteria that will be used to screen transuranic (TRU) waste streams for exclusion from the Waste Isolation Pilot Plant (WIPP)-bound inventory. This WIPP-bound waste is used in future performance assessments (PAs) for the Compliance Recertification Application (CRA). This memo does not address high level, low level or commercial waste since they are prohibited for disposal in WIPP. The table below contains screening criteria that will be used to designate Potential waste streams. The table in no way indicates that waste identified as Potential will be excluded from emplacement in WIPP in the future.

All waste streams collected for each Annual TRU Waste Inventory Report (ATWIR) are categorized within the TRU waste inventory database as WIPP-Bound unless one or more of the screening criteria listed in the table below are encountered. All shipments to WIPP will be subject to the conditions delineated in the WIPP Hazardous Waste Facility Permit Waste Analysis Plan (WAP), WIPP Waste Acceptance Criteria (WAC) and the Transuranic Authorized Methods for Payload Control (TRAMPAC). The table below is intended to be treated as a guide for delineating Potential waste streams that will be reported in the ATWIR in Appendix C and excluded from being reported in Performance Assessment Inventory Report (PAIR) that will be used for future PAs.

Criteria for Categorizing Waste Streams as Potential

Screening Criteria	Comment
TRU Determination Undetermined	Will remain potential until the waste stream has been officially determined to be transuranic. If the waste stream is determined to be non-transuranic then it will be removed from the inventory.
Defense Determination Unknown	Will remain potential until the waste stream has been officially determined to be defense waste. If the waste stream is determined to be non-defense then it will be removed from the inventory.
Regulatory Restrictions • Surface Dose > 1000 R/hr • Activity >23 Ci/L (or 23,000 Ci/m^3) averaged over the volume of the canister • Prohibited hazardous constituents • Summary category groups other then S3000, S4000, S5000 • And other regulatory restrictions	Will remain potential until the waste stream meets all acceptance criteria for WIPP. This may involve: • Repackaging waste stream • Treating waste stream • Removal of restricted items from waste stream • Any other process that would remediate the regulatory restriction
Incomplete Data • Incomplete or missing radionuclide concentrations • Incomplete or missing WMP	Will remain potential until the waste stream reports all required data.

Screening Criteria	Comment
densities • Incomplete or missing final form container information • Unknown waste stream information • Any other incomplete or missing waste stream information that is required for PA	
Directed by DOE to move to Potential	Will remain potential until DOE directs to remove waste stream from potential.

DOE/CBFO Compliance Certification Manager

Russ Patterson

03/29/10

Date

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