WPO 43201

CAO-94-1005
Revision 1

Waste Isolation Pilot Plant Transuranic Waste Baseline Inventory Report

CAO-94-1005, Rev. 1
cy. 2

February 1995

Volume 1

SWCF-A: 1.1.4.3: REFS

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United States Government

Department of Energy

memorandum

Carlsbad Area Office
Carlsbad, New Mexico 88221

DATE: MAR 13 1995

REPLY TO ATTN OF: CAO:JSD 95-0676

SUBJECT: Waste Isolation Pilot Plant Transuranic Waste Baseline Inventory Report, Revision 1

TO: Those on Attached List

Please find attached a copy of Revision 1 to the Waste Isolation Pilot Plant (WIPP) Transuranic Waste Baseline Inventory Report (WTWBIR), CAO-94-1005 (February 1995).

Like Revision 0, Revision 1 presents a methodology for combining individual waste streams into waste profiles with similar physical and chemical properties. It also documents, by waste stream, the waste material parameters which have been identified as potentially important to the WIPP repository performance. These waste material parameters are then rolled-up through the waste profiles to describe the total WIPP disposal inventory.

In addition, Revision 1 now reflects waste information which was collected directly from the generator/storage sites. It also presents radionuclide information at the waste stream level and reports waste volumes in the final waste forms that will be shipped to WIPP.

Revision 1 also includes a "read only" diskette containing the waste stream profile data used to produce the report. The software runs on Access 2.00, and instructions for loading and operating the program are included on the diskette.

Because of the need to ensure only the most current data is discussed among DOE and the regulators, we have produced both "controlled" and "information" copies of Revision 1. Those of you receiving "controlled" copies are requested to sign and return the Document Transmittal Acknowledgement Receipt (DTAR), which can be found in the inside pocket of Volume 1, to Jim Teak, Advanced Sciences, Incorporated at 6739 Academy Road, NE, Albuquerque, NM 87109-3345. The receipt of the signed DTAR will provide ready reference to those organizations which are in possession of the controlled copies of Revision 1.

If you require further assistance, please contact Jimmy S. Dyke, of my staff, at (505) 234-7476.

Mark L. Matthews, P.E.
Manager
National TRU Program Office

Attachment

cc w/ attachment:
Mike McFadden, CAO

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George Dials, CAO
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Dennis Hurtt, CAO

CAO-94-1005
Revision 1

Waste Isolation Pilot Plant Transuranic Waste Baseline Inventory Report

February 1995

Prepared by WIPP Technical Assistance Contractor
for U.S. Department of Energy
under Contract No. DE-AC04-93AL-96904

Volume 1

003

TABLE OF CONTENTS

004

005

VOLUME 2

VOLUME 3

006

LIST OF FIGURES

008

LIST OF TABLES

010

ACRONYMS AND ABBREVIATIONS

AE	ANL-E site identifier
AL	Ames Laboratory site identifier
ANL-E	Argonne National Laboratory-East
AW	ANL-W site identifier
ANL-W	Argonne National Laboratory-West
BC	Battelle Columbus Laboratory site identifier
BT	Bettis Atomic Power Laboratory site identifier
CFR	Code of Federal Regulations
CH	contact handled
CY	calendar year
D&D	decontamination and decommissioning
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
ER	environmental restoration
ET	ETEC site identifier
ETEC	Energy Technology Engineering Center
FFCAct	Federal Facility Compliance Act
FGE	Fissile Gram Equivalent
HDPE	high-density polyethylene
HQ	(DOE) Headquarters
ID	identification
IDB	Integrated Data Base
IDC	item description code
IN	INEL site identifier
INEL	Idaho National Engineering Laboratory
IT	ITRI site identifier
ITRI	Inhalation Toxicology Research Institute
KA	KAPL site identifier
KAPL	Knolls Atomic Power Laboratory - Schenectady
kg	kilograms
LA	LANL site identifier
LANL	Los Alamos National Laboratory
LB	LBL site identifier
LBL	Lawrence Berkeley Laboratory
LL	LLNL site identifier
LLNL	Lawrence Livermore National Laboratory
MD	Mound Plant site identifier
m^3	cubic meters
mrem	millirem
MU	University of Missouri site identifier
MTRU	mixed transuranic
MWIR	Mixed Waste Inventory Report
NMVP	No-Migration Variance Petition
NT	NTS site identifier
NTS	Nevada Test Site
OR	ORNL site identifier

011

ORNL	Oak Ridge National Laboratory
PA	performance assessment (in text only)
PA	PGDP site identifier (in waste profiles only)
PCB	polychlorinated biphenyls
PGDP	Paducah Gaseous Diffusion Plant
PX	Pantex site identifier
RADAC	Radioactive Decay and Accumulation Code (System)
RCRA	Resource Conservation and Recovery Act
RF	RFETS site identifier
RFETS	Rocky Flats Environmental Technology Site
RH	remote handled
RL	Richland (Hanford) site identifier
SA	SNL/NM site identifier
SARP	Safety Analysis Report for Packaging
SNL/NM	Sandia National Laboratories/New Mexico
SPM	Systems Prioritization Methodology
SR	SRS identifier
SRS	Savannah River Site
SWB	Standard Waste Bay
TRU	transuranic
TRUCON	TRUPACT-II Content Codes
TRUPACT-II	Transuranic Package Transporter-II
TSCA	Toxic Substances Control Act
WAC	waste acceptance criteria
WIPP	Waste Isolation Pilot Plant
WMC	waste matrix code
WMCG	waste matrix code group
WS	waste stream
WTWBIR	Waste Isolation Pilot Plant Transuranic Waste Baseline Inventory Report
WTWBID	Waste Isolation Pilot Plant Transuranic Waste Baseline Inventory Database
WV	WVDP site identifier
WVDP	West Valley Demonstration Project

012

PREFACE

PREFACE

The information in this report summarizes the U.S. Department of Energy's (DOE) transuranic (TRU) waste inventory, projections, and characteristics. Revision 0 of the Waste Isolation Pilot Plant (WIPP) Transuranic Waste Baseline Inventory Report (WTWBIR) published in June 1994, was the first attempt ever made by the DOE complex to report all of its TRU waste at the waste stream level. The waste data reported in Revision 0 was considered preliminary until quality checks of the data were completed by the DOE TRU waste generator/storage sites. Data changes resulting from the site reviews are contained herein.

The primary differences between Revision 0 and Revision 1 of the WTWBIR are as follows:

- The WIPP baseline inventory reported in Revision 0 was complied from three existing DOE databases, whereas, inventory data in Revision 1 was collected directly from the sites through a request made by the National TRU Program Office.
- The nonmixed, TRU waste streams reported in Revision 0 were derived from the volume differences between the Integrated Data Base (IDB) and Mixed Waste Inventory Report (MWIR), while the nonmixed TRU waste streams contained in Revision 1 are as reported by the TRU waste generator/storage sites.
- Revision 1 of the WTWBIR reports radionuclide data at the waste stream level. Where sites provided radionuclide data as the waste stream level, it is replicated in Appendix A. A WIPP radionuclide inventory is provided in Table 4-2. This table is derived from the data submitted to support the IDB. Revision 0 reported the radionculide data at the WIPP level.
- Revision 1 reports the waste volumes in the final waste form that will be sent to WIPP. All previous databases, including Revision 0 of WTWBIR, report the waste in terms of volumes in storage before processing to meet WIPP requirements.
- The total radionuclide inventory for contact-handled (CH) TRU waste is much higher in Revision 1 than reported in Revision 0. This is due to two reasons: 1) Savannah River Site waste that was previously reported as "unknown" had not been included in the estimates, and 2) the "projected" part (1993-2022) of the CH-TRU radionuclide inventory was inadvertently left out of the totals reported in Revision 0, causing the inventory to be approximately 25% low. Revision 1 corrects the inventory reporting error.
- The total radionuclide inventory for remote-handled (RH) TRU waste is also much higher in Revision 1. During calculation of the RH-TRU inventory the volume defined by the sites included more waste than the repository is authorized to accept. During those calculations, the IDB radionuclide numbers only covered the "stored" part of the inventory. This made the RH-TRU inventory reported in Revision 0 to be low by a factor of approximately 3-4. Revision 1 corrects the inventory reporting error.
- Oak Ridge National Laboratory has reported a very conservative inventory for U-235 in its RH-TRU waste (≈367 curies). In order to provide a more realistic estimate of the U-235 inventory, an anticipated transportation requirement for the RH-TRU cask was imposed in Revision 1. This requirement modifies the U-235 estimate reported in Revision 0.

014

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

The *Waste Isolation Pilot Plant (WIPP) Transuranic Waste Baseline Inventory Report* (WTWBIR) establishes a methodology for grouping wastes of similar physical and chemical properties, from across the U.S. Department of Energy (DOE) transuranic (TRU) waste system, into a series of "waste profiles" that can be used as the basis for waste form discussions with regulatory agencies. The majority of this document reports TRU waste inventories of DOE defense sites. An appendix is included which provides estimates of commercial TRU waste from the West Valley Demonstration Project.

The WIPP baseline inventory is estimated using waste streams identified by the DOE TRU waste generator/storage sites, supplemented by information from the Mixed Waste Inventory Report (MWIR) and the 1994 Integrated Data Base (IDB). The sites provided and/or authorized all information in the Waste Stream Profiles except the EPA (hazardous waste) codes for the mixed inventories. These codes were taken from the MWIR (if a WTWBIR mixed waste stream was not in MWIR, the sites were consulted). The IDB was used to generate the WIPP radionuclide inventory. Each waste stream is defined in a waste stream profile and has been assigned a waste matrix code (WMC) by the DOE TRU waste generator/storage site. Waste stream profiles with WMCs that have similar physical and chemical properties can be combined into a waste matrix code group (WMCG), which is then documented in a site-specific waste profile for each TRU waste generator/storage site that contains waste streams in that particular WMCG.

Based on methodology presented in this WTWBIR, a maximum of 11 site-specific waste profiles have been identified for contact-handled (CH) TRU waste and a maximum of 11 have been identified for remote-handled (RH) TRU waste for each site. Each of these site-specific waste profiles have unique WMCG criteria and they are developed, if appropriate, for each of the TRU waste generator/storage sites. A particular site-specific waste profile, with a specific WMCG, can be combined with other site-specific waste profiles having identical WMCGs from the TRU waste generator/storage sites to derive a WIPP waste profile.

The anticipated inventory of TRU waste is defined as the sum of retrievably stored waste (waste generated after 1970) plus currently projected TRU waste volumes. The anticipated inventory for CH-TRU waste is not sufficient to fill the maximum allowed capacity of WIPP (calculated: 6.2 million cubic feet [≈176,000 cubic meters]), and scaling has been developed as a means for Sandia National Laboratories' model to examine the impacts of the full repository. Scaling has also been applied to the RH-TRU inventory since sufficient volume has not been identified in the anticipated RH-TRU inventory to fill WIPP to the RH-TRU design capacity (≈7080 cubic meters). Additionally, there is a high uncertainty in and a current lack of data on wastes produced from decontamination and decommissioning (D&D) and environmental restoration (ER) activities. Therefore, the anticipated CH-TRU inventory has been "scaled" to the maximum allowed WIPP capacity and the RH-TRU to the design capacity. The scaling of the inventories in this and future revisions of the WTWBIR will be derived from the best available data and assumptions.

An example of five waste streams at two sites (Figure 3-2 in the main body of the report) has been used to illustrate the waste profile methodology. Total WIPP inventory volumes for the WIPP waste profiles are provided.

016

Using the same waste profile methodology, the WTWBIR also estimates the WIPP disposal inventory (anticipated inventory that has been scaled to WIPP design capacity) in terms of 10 waste material parameters and additional packaging materials that have been identified as inputs needed for the system prioritization methodology (SPM) and performance assessment (PA) calculations. The 10 waste material parameters and additional packaging materials are waste constituents that occur in TRU waste and are input parameters for one or more SPM and PA models or are required to adequately describe the waste form. These parameters may change as a result of SPM and PA efforts.

The 10 waste material parameters have been grouped by their chemical/physical properties and are indicated in bold lettering. The 10 waste material parameters and additional packaging materials that are defined and included in the WTWBIR are:

- Inorganics
  - **Iron-based metals/alloys**
  - **Aluminum-based metals/alloys**
  - **Other metals**
  - **Other inorganic materials**
- Organics
  - **Cellulosics**
  - **Rubber**
  - **Plastics**
- Solidified Materials
  - **Inorganic matrix**
  - **Organic matrix**
- **Soils**
- Packaging Materials
  - Steel
  - Plastic
  - Lead

The waste material parameter information is reported in kilograms per cubic meter of waste matrix (kg/m^3). The waste material parameters in the waste stream, site-specific, and WIPP waste profiles are expressed on a weight/volume basis. However, the occurrence of more than one waste material parameter at the maximum value within a waste stream is highly unlikely. If needed, during SPM and PA (Tables 5-1 and 5-2) calculations, the sampling statistics (if used) must be controlled so that several waste material parameters do not get sampled all at their maximum value (weight/volume), lest the average weight/volume is exceeded. To illustrate the waste profile methodology, five waste streams from two sites are used as examples. This revision of the WTWBIR provides a diskette that contains the WIPP TRU Waste Baseline Inventory Database in Microsoft Access®.

Although the initial purpose of this report is to provide data to be included in the Sandia National Laboratories/New Mexico SPM and PA processes, all data are presented and explained in such a way that they can be adapted as needed for other applications. The WTWBIR, Revision 1, is presented in three parts: Volume 1 contains this Executive Summary through Chapter 9 and the WTWBID diskette; Volume 2 contains Appendix A, Waste Stream Profiles; and Volume 3 Appendices B through J.

017

CHAPTER 1

1. INTRODUCTION

1.1 BACKGROUND

The Waste Isolation Pilot Plant (WIPP) is a transuranic (TRU) waste management facility operated by the U.S. Department of Energy (DOE). The WIPP is currently identified as the permanent disposal site for DOE TRU waste.

TRU waste is defined as waste that is contaminated with alpha-emitting radionuclides with an atomic number greater than 92, with half-lives greater than 20 years, and concentrations of TRU isotopes greater than 100 nanocuries per gram of waste (DOE, 1988). TRU wastes are classified as either contact-handled (CH) waste or remote-handled (RH) waste, depending on the dose rate at the surface of the waste container. CH-TRU wastes are packaged TRU wastes with an external surface dose rate of 200 millirems (mrem) or less per hour, while RH-TRU wastes are packaged TRU wastes with an external surface dose rate exceeding 200 mrem per hour. Unless otherwise indicated, for purposes of this document, all references to TRU waste include TRU waste and mixed TRU waste (waste that contains both radioactive and hazardous components, as defined by the Atomic Energy Act and the Resource Conservation and Recovery Act [RCRA] as codified in Title 40 Code of Federal Regulations [CFR] Parts 264, 265, 268, and 270 [EPA, 1980a; 1980b; 1986; and 1983]).

The DOE is committed to demonstrating compliance with all applicable regulations prior to permanent disposal of TRU wastes in the WIPP repository. These regulations are the environmental standards for management and disposal of TRU wastes as mandated in 40 CFR Part 191 (EPA, 1993) and Part 194 (DOE, 1995), and the RCRA regulations. Compliance will be demonstrated through Sandia National Laboratory/New Mexico (SNL/NM) performance assessment (PA) calculations based on the inventory of existing and currently projected waste streams developed in this document, as reported by the DOE TRU waste generator/storage sites. The WIPP is scheduled to receive and dispose of TRU wastes from 10 major and several minor DOE TRU waste generator/storage sites (see Figure 1-1).

1.2 PURPOSE

The purpose of this report, the *Waste Isolation Pilot Plant Transuranic Waste Baseline Inventory Report* (WTWBIR), is to document the disposal inventory of TRU waste to be emplaced in WIPP as defined by the DOE TRU waste generator/storage sites. This inventory of CH-TRU and RH-TRU waste will be used in the SNL/NM systems prioritization methodology (SPM)/PA calculations and sensitivity analyses that will support the development of compliance applications to the appropriate regulatory agencies regarding the operations and post-closure timeframes of the WIPP repository.

To accomplish this purpose, the WTWBIR has been developed from the best available information and process knowledge provided by the DOE TRU waste generator/storage sites. In support of SPM/PA, the WTWBIR describes a process for grouping individual waste streams with similar physical and chemical properties into waste profiles, based on their waste matrix code (WMC) (DOE, 1993a) assigned by the DOE TRU waste generator/storage sites. Waste profiles with similar WMCs, are then combined across the DOE TRU waste system to provide estimated total volumes and total waste material parameters. The methodology for this grouping and combining is discussed in detail in Section 2.3, Methodology for Development of Disposal Inventory.

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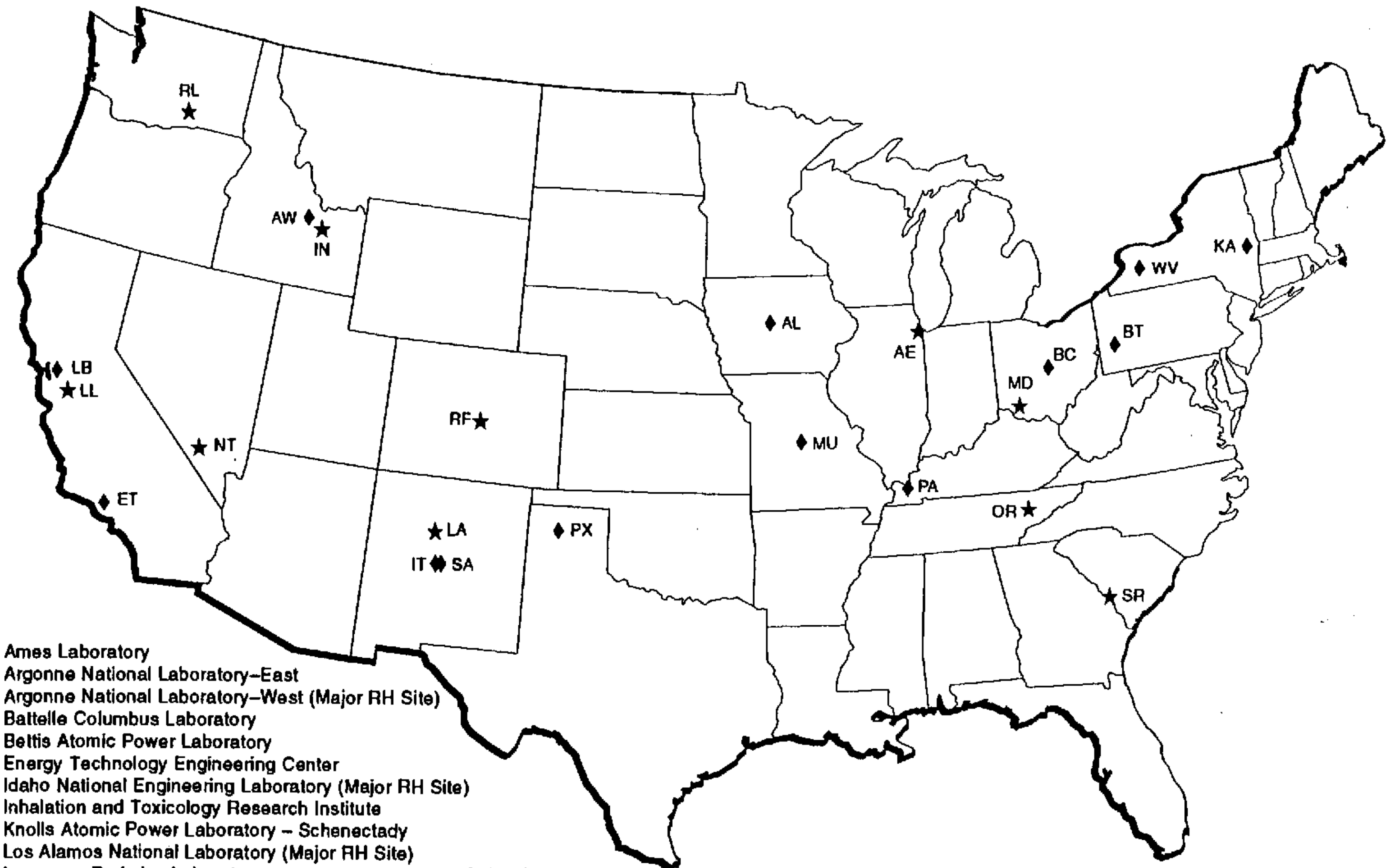


AL	Ames Laboratory
AE	Argonne National Laboratory–East
AW	Argonne National Laboratory–West (Major RH Site)
BC	Battelle Columbus Laboratory
BT	Bettis Atomic Power Laboratory
ET	Energy Technology Engineering Center
IN	Idaho National Engineering Laboratory (Major RH Site)
IT	Inhalation and Toxicology Research Institute
KA	Knolls Atomic Power Laboratory – Schenectady
LA	Los Alamos National Laboratory (Major RH Site)
LB	Lawrence Berkeley Laboratory
LL	Lawrence Livermore National Laboratory
MD	Mound Plant
MU	University of Missouri
NT	Nevada Test Site
OR	Oak Ridge National Laboratory (Major RH Site)
PA	Paducah Gaseous Diffusion Plant
PX	Pantex Plant
RF	Rocky Flats Environmental Technology Site
RL	Richland (Hanford) Site (Major RH Site)
SA	Sandia National Laboratories/New Mexico
SR	Savannah River Site (Major RH Site)
WV	West Valley Demonstration Project (Commercial Waste Only – Not in Inventory)

♦ Indicates Minor Site
★ Indicates Major Site

Figure 1-1. U.S. Department of Energy Transuranic Waste Generator/Storage Sites.

The individual waste streams also are evaluated to estimate the occurrence and quantities of non-radioactive waste material parameters as defined in Appendix C and listed in Table 1-1 (e.g., cellulosics, plastics, iron-based metals/alloys, etc.) that have been identified by SNL/NM as being potentially important to the performance of the WIPP repository. The methodology, assumptions, and totals of these waste material parameters are described in Chapter 5, Waste Material Parameters.

TABLE 1-1. TECHNICAL DATA NEEDS FOR SYSTEMS PRIORITIZATION METHODOLOGY/PERFORMANCE ASSESSMENT WASTE MATERIAL PARAMETERS

Waste Material Parameter	Input Variable in Current SPM/PA Models		Input Variable in SPM/PA Models Under Development	Input Variable in Possible Future SPM/PA Models
	Gas Generation	Mechanical Characteristics		
Iron-Based Metals/Alloys	YES	YES	YES	YES
Aluminum-Based Metals/Alloys	YES(2)	YES	YES	YES
Other Metals		YES		YES
Other Inorganic Materials		YES	YES	YES
Cellulosics	YES	YES	YES	YES
Plastics	YES(2)	YES	YES	YES
Rubber	YES(1)	YES	YES	YES
Solidified Inorganic Matrix		YES	YES	YES
Solidified Organic Matrix		YES	YES	YES
Soils		YES		

(1) Only 50 weight percent included
(2) Added for SPM-2 (Sanchez, 1995)

The information/data presented in this report is derived from the WIPP Transuranic Waste Baseline Inventory Database (WTWBID). The only currently defined application of the WTWBID in this revision of the WTWBIR is in support of the SPM/PA calculations. However, the WTWBID can support other projects and applications requiring waste information in formats different than that used in the WTWBIR. The WTWBID structure and a data dictionary are included in Chapter 7 of this report.

1.3 WASTE INVENTORY TERMINOLOGY

The derivation of a disposal inventory from individual waste streams is a formidable and complex process. To document each step of this process, a system of waste inventory terminology needs to be defined so the reader may more easily follow the process. The following sections provide definitions of terminology used throughout the WTWBIR. These definitions also are summarized in Chapter 8, Glossary. A list of acronyms and abbreviations used are provided in the front of the document.

1.3.1 Inventory Terminology

Stored Inventory – That part of the TRU inventory currently in retrievable storage at the time of the last data call for inventory information is known as "stored inventory." For Revision 1, stored waste includes that waste in storage as of December 31, 1993. Retrievably stored waste includes waste stored since approximately 1970 in buildings or in berms with earthen cover and **does not include any waste that was buried prior to 1970** (DOE, 1994b).

Projected Inventory – That part of the TRU inventory that has not been generated but is currently estimated to be generated at some time in the future by the TRU waste generator/storage sites is considered "projected inventory." Because of the uncertainty associated with ER and D&D waste inventory projections, the ER and D&D wastes are not included in the projected inventory. For Revision 1, a projected inventory includes waste scheduled for generation between calendar years (CY) 1994 and 2022. "Newly generated waste" also is sometimes used as a synonym for the projected inventory.

Anticipated Inventory – For the WTWBIR, this is the sum of the stored and projected inventories, calculated:

$$\text{Stored Inventory} + \text{Projected Inventory} = \text{Anticipated Inventory}$$

Scaling – The process for adjusting, if needed, the projected inventory to the design limit (disposal inventory) of the WIPP repository is called "scaling." Section 2.3, describes the scaling process used for developing the WTWBIR.

$$\text{Projected Inventory} \xrightarrow{\text{Scaling}} + \text{Stored Inventory} = \text{Disposal Inventory}$$

Disposal Inventory – The total design (≈176,000 x 10^5 m^3 for CH-TRU and 7080 m^3 for RH-TRU) inventory defined for WIPP emplacement (after scaling, if necessary) to be used for SPM and PA calculations is the "disposal inventory."

1.3.2 Waste Matrix Code Terminology

Waste Matrix Code (WMC) - The WMCs were developed by DOE, in response to the Federal Facilities Compliance Act (FFCAct)(Public Law 102-386, 1992), as a methodology to aid in classifying mixed waste streams in the DOE system into a series of four-digit codes (e.g., 5400; Heterogeneous Waste) that represent different physical/chemical matrices. The WMC is assigned

022

by the TRU waste generator/storage sites. The WTWBIR has adopted this system to remain consistent with the Mixed Waste Inventory Report (MWIR)(DOE, 1994a) which was a database-derived report to meet the first deliverable under the FFCAct. The WMC methodology has been applied to nonmixed TRU waste streams for consistency.

Waste Matrix Code Group (WMCG) – A WMCG consists of a series of WMCs that for SPM or PA purposes have similar physical and chemical properties. An example of combining three WMCs which either contain particulates or are cemented particulate waste is presented below:

WMC 3100 (inorganic process residues) WMC 3110 (inorganic particulates) WMC 3150 (solidified process residues)	Solidified Inorganics

Because of the restriction on particulate wastes in the *TRU Waste Acceptance Criteria (WAC) for the Waste Isolation Pilot Plant*, Revision 4 (DOE, 1991), all particulate waste will usually be immobilized prior to shipment to WIPP. Therefore, all three of these WMCs would be the same basic waste form when emplaced in WIPP and have similar physical and chemical properties. The combined WMCG for this example is solidified inorganics. Table 1-2 presents all anticipated WMCs for TRU waste and indicates in which WMCG each WMC occurs for the WTWBIR. There are 11 WMCGs used in this WTWBIR. The last two rows in Table 1-2 group WMCs that will not be accepted at WIPP unless additional characterization and/or processing occurs to meet the WIPP WAC (DOE, 1991).

1.3.3 Waste Profile Terminology

Waste Stream Profile – This is a description of a CH-TRU or RH-TRU waste stream potentially destined for shipment to and disposal in WIPP, if authorized under permits and certifications by appropriate regulatory agencies. The waste stream profile is presented in tabular format and is intended to provide a summary of important information about a particular waste stream. Examples of information included in a waste stream profile are:

- Currently used identification codes, including the DOE TRU waste site matrix description;
- WMC assigned by the TRU waste generator/storage sites;
- Volumes of waste currently in retrievable storage and waste projected to be generated: estimated minimum, average, and maximum weights of waste material parameters per cubic meter of waste volume (e.g., iron-based metals/alloys, aluminum-based metals/alloys, cellulosics, etc.);
- Indication as to whether the waste is CH-TRU or RH-TRU; and
- Hazardous waste codes (EPA codes) from MWIR or as assigned by the DOE TRU waste generator/storage sites for the RCRA regulated portion of the waste stream. Some waste streams (waste stream profiles) contain hazardous waste codes that would not be currently acceptable for disposal in WIPP (e.g., D001, D002, and D003) under the most recent WIPP Part B Permit Application (DOE, 1993b). These hazardous waste codes are applied to the waste in its current physical form. These waste streams will have to be treated for any unacceptable hazardous waste codes prior to transport to WIPP for disposal.

TABLE 1-2. WASTE MATRIX CODE GROUP NAMES

Waste Matrix Code Group	Waste Matrix Codes
Solidified Inorganics	1000[1], 1100[1], 1110[1], 1120[1], 1130[1], 1140[1], 1190[1],1200[1], 1210[1], 1220[1], 1230[1], 1240[1], 1290[1], 3000[2], 3100, 3110[3], 3111[3], 3112[3], 3113, 3115[3], 3116[3], 3119[3], 3120, 3121, 3122, 3123, 3124, 3125, 3129, 3130, 3131[3], 3132[1], 3139[1 or 3], 3150, 3190, 3900[2], 6100[4], 6120[5], 6130[6], 6140[5], 6190[4], 6200[7], 6210[8], 6230[8], 6290[7], 7300[3], 9100[2], 9200[2]
Salt Waste	3000[2], 3140, 3141, 3142, 3143, 3149,3900[2]
Solidified Organics	2000[1], 2100[1], 2110[1], 2120[1], 2190[1], 2200[1], 2210[1], 2220[1], 2290[1], 2900[1], 3000[2], 3114, 3200, 3210, 3211, 3212, 3213, 3219, 3220, 3221, 3222, 3223, 3229, 3230, 3290, 3900[2], 6100[4], 6110[5], 6190[4], 6200[7], 6290[7], 9100[2], 9200[2]
Soils	4000, 4100, 4200, 4900
Uncategorized Metal (Metal Waste Other Than Lead and/or Cadmium)	5000[9], 5100, 5110, 5190, 6200[7], 6220[8], 7000[10], 7490[11], 9300[10]
Lead/Cadmium Metal	5000[9], 5120, 5130, 6200[7], 6220[8], 7000[10], 7200, 7210, 7220, 7400[11], 7410[11], 7420[11], 9300[10]
Inorganic Non-Metal Waste	5000[9], 5200, 5210, 5220, 5230, 5240, 5290
Combustible	5000[9], 5300, 5310, 5311, 5312, 5313, 5319, 5320, 5330, 5390
Graphite	5000[9], 5340
Heterogeneous	5000[9], 5400, 5420, 5430, 5440, 5450, 5490, 6200[7], 6220[8], 6290[7]
Filter	5000[9], 5410
Excluded Waste Streams[12]	5250, 5350, 6300, 6400, 7100
Unknown[13]	8000, 8100, 8200, 8900

024

TABLE 1-2. WASTE MATRIX CODE GROUP NAMES (CONTINUED)

[1] Liquid waste streams are assumed to be solidified prior to sending to WIPP.

[2] WMCs 3000, 3900, 9100, and 9200 are placed in "solidified inorganics," "salt waste," or "solidified organics," depending on the information provided by the TRU waste generator/storage site.

[3] Particulate waste streams are assumed to be solidified prior to sending to WIPP.

[4] WMCs 6100 and 6190 are placed in "solidified organics," or "solidified inorganics," depending on the information provided by the TRU waste generator/storage site.

[5] Liquid lab pack waste is assumed to be solidified prior to sending to WIPP.

[6] Solid lab packs are assumed to be solidified prior to sending to WIPP.

[7] WMCs 6200 and 6290 are placed in "solidified organics," "solidified inorganics," or "heterogeneous" if the waste stream must be solidified per the generator/storage site. They are placed in "uncategorized metal," or "lead/cadmium metal waste" if they are primarily nonreactive metal contaminated with reactive metal. Reactive waste streams must be treated prior to shipment to WIPP.

[8] Waste stream is assumed to be treated prior to sending to WIPP. Volume change is provided by the TRU waste generator/storage site .

[9] WMC 5000 is placed in "uncategorized metal," "lead/cadmium metal," "inorganic non-metal," "combustible," "graphite," "heterogeneous," or "filter," depending on the information provided by the generator/storage site.

[10] WMC 7000 and 9300 are placed in "uncategorized metal" or "lead/cadmium metal," depending on the information provided by the generator/storage site.

[11] WMCs 7400, 7410, 7420, and 7490 are assumed to be drained of liquid and contain only metal waste.

[12] These waste streams are excluded from disposal in WIPP at this time, e.g., PCB and asbestos wastes (see Table 3-2).

[13] If adequate information is provided by the generator/storage site, these WMCs are changed. If there is not enough information, these waste streams remain as "unknown" and are excluded from disposal in WIPP until characterized.

025

- Comments provided by the TRU waste generator/storage sites to further explain the data provided.
- Footnotes generated by the WTWBIR team to explain information provided by the generator/storage sites.
- TRUPACT-II Content (TRUCON) Codes (DOE, 1992) and No Migration Variance Petition (NMVP) (DOE, 1990) identifiers.

Figure 1-2 provides an example of a blank waste stream profile form. The methodology for developing waste stream profiles is provided in Chapter 3 and printouts of TRU waste stream profiles are provided in Appendix A.

Site-Specific Waste Profile – This represents a WMCG at a particular DOE TRU waste generator/storage site. That is, one or more waste stream profiles at a particular DOE TRU waste site, that have been placed in the same WMCG, are summarized in the site-specific waste profile. Examples of information included in a site-specific waste profile are:

- DOE TRU waste generator/storage site identification;
- The WMCG that the profile represents;
- Listing of the waste streams (represented by waste stream profiles provided by the TRU waste generator/storage sites) that are included in the site-specific waste profile, including the waste stream identification;
- Volumes of stored and currently projected waste; and
- Summary of minimum, volume weighted average, and maximum weights of waste material parameters per cubic meter of waste volume (e.g., iron-based metals/alloys, aluminum-based metals/alloys, cellulosics, etc.).

Figure 1-3 provides an example of a blank site-specific waste profile form. The methodology for developing site-specific waste profiles is provided in Chapter 3 and printouts of TRU site-specific waste profiles are provided in Appendix B.

WIPP Waste Profile – The WIPP waste profile represents a summary of TRU waste at all DOE TRU waste generator/storage sites that have an identical WMCG. Examples of information included in a WIPP waste profile are:

- Profile name;
- The WMCG that the profile represents;
- Listing of the DOE TRU waste sites (represented by the same WMCG) that are included in the WIPP waste profile, including the name of the DOE TRU waste site;
- Volumes of stored and currently projected waste for each site for the particular WMCG represented; and
- Summary of minimum, volume weighted average, and maximum weights of waste material parameters per cubic meter of waste volume (e.g., iron-based metals/alloys, aluminum-based metals/alloys, cellulosics, etc.).

026

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME

WASTE TYPE [ ] HANDLING [ ] GENERATOR SITE [ ]

WASTE STREAM MWIR ID [ ]
WIPP ID [ ]
Local ID [ ]

STREAM NAME [ ]

DESCRIPTION [ ]

MATRIX CODE [ ]

SITE FINAL FORM IDC [ ]

Waste Matrix Code Group [ ]

Site Matrix Description [ ]

NO MIGRATION VARIANCE PETITION ASSIGNMENT [ ] **TRUCON CODE** [ ]

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste [ ]	Mixed TRU [ ]	Rsearch and Devel. Waste [ ]	TSCA	Asbestos [ ]
Non-Defense TRU Waste [ ]	Non-Mixed TRU [ ]	Operations Waste [ ]		PCBs [ ]
Commercial TRU Waste [ ]	Suspect Mixed TRU [ ]	Residues [ ]		Other [ ]
Unknown [ ]	Unknown [ ]	Decon and Decommissioning [ ]		N/A [ ]
		Environmental Restoration [ ]		Unknown [ ]
		From Treatment of Waste [ ]		
		Maintenance [ ]		

Figure 1-2. Blank Waste Stream Profile Form

CAO-94-1005, Revision 1
February 1995

027

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME

WASTE TYPE [ ] **HANDLING** [ ] **GENERATOR SITE** [ ]

CONTAINER: [ ]
Type/Size: [ ]

Container Matl: [ ]
Int. Vol/Ctnr: [ ] m3

Liner Type: [ ]
Liner Material: [ ]

Number Stored: [ ]
Number Projected: [ ]

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys			
Aluminum-Based Metals/Alloys			
Other Metals			
Other Inorganic Materials			
Cellulosics			
Rubber			
Plastics			
Solidified, Inorganic matrix			
Solidified, Organic matrix			
Soils			
Packaging Materials, Steel			
Packaging Material, Plastic			

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:			m3
End of 1993:			m3
1994:			m3/yr
1995:			m3/yr
1996:			m3/yr
1997:			m3/ry
1998-2002:			m3/yr
2003-2022:			m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Figure 1-2. Blank Waste Stream Profile Form (continued)

Site-Specific Contact Handled Waste Profiles

Site Name:

Final Waste Form:

Waste Stream ID	**Retrievably Stored (m3)**	**Projected (m3)**	**Total (m3)**

Total Volume:

Material Parameters (kg/m3)		**Maximum**	**Average**	**Minimum**
Inorganics	**Iron Based**			
	Aluminum Based			
	Other Metals			
	Other Inorganics			
Organics	**Cellulose**			
	Rubber			
	Plastics			
Solidified Materials	**Inorganic**			
	Organic			
Soils				

Figure 1-3. Blank Site-Specific Waste Profile Form

029

Figure 1-4 provides an example of a blank WIPP waste profile form. The methodology and assumptions for developing WIPP waste profiles and printouts of the WIPP profiles are provided in Chapter 3.

1.3.4 Database Terminology

Mixed Waste Inventory Report (MWIR) – The MWIR refers to the latest release of information from the MWIR database that supports requirements under the FFCAct of 1992 (Public Law 102-386). The latest version of the MWIR documentation/files is *Distribute* [Distribution] *of Phase II Mixed Waste Inventory Report Data*, dated May 17, 1994 (DOE, 1994a).

Integrated Data Base (IDB) – The IDB refers to the latest version of the Integrated Data Base: U.S. Spent Fuel and Radioactive Waste Inventories, Projections, and Characteristics (DOE, 1994b).

WIPP Transuranic Waste Baseline Inventory Database (WTWBID) – The WTWBID is the database specifically developed to support the WTWBIR and any other applications that might need waste information on a waste–stream basis or for higher–level roll-ups.

1.3.5 Other Terminology

Waste Material Parameter – This is one or more nonradioactive waste constituents that occur in a TRU waste stream that is an input parameter into one or more current SPM or PA models, an SPM or PA model under development, a potential future model, or is required to adequately describe the waste form (see Appendix C). The 10 waste material parameters have been grouped by their chemical/physical properties and are indicated in bold lettering. The 10 waste material parameters and additional packaging materials that are reported in densities and included in the WTWBIR are:

- Inorganics
  - **Iron-based metals/alloys**
  - **Aluminum-based metals/alloys**
  - **Other metals**
  - **Other inorganic materials**
- Organics
  - **Cellulosics**
  - **Rubber**
  - **Plastics**
- Solidified Materials
  - **Inorganic matrix**
  - **Organic matrix**
- **Soils**
- Packaging Materials
  - Steel
  - Plastic
  - Lead

Definitions for these waste material parameters can be found in Chapter 5.

030

WIPP Contact Handled Waste Profiles

Final Waste Form:

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
Total Volume			

		Material Parameters (Kg/m3)		
		Maximum	Average	Minimum
Inorganics	Iron Based			
	Aluminum Based			
	Other Metals			
	Other Inorganics			
Organics	Cellulose			
	Rubber			
	Plastics			
Solidified Materials	Inorganic			
	Organic			
Soils				

Figure 1 - 4. Blank WIPP Waste Profile Form

031

1.4 OBJECTIVES

The objectives of the WTWBIR are threefold:

1. **Establish a consistent DOE complex-wide methodology for grouping wastes of similar physical and chemical composition.** A consistent methodology, in support of SPM/PA, for grouping TRU wastes of similar physical and chemical properties into "waste profiles" will provide a common frame of reference for discussion of TRU waste issues with regulatory organizations.

2. **Define the anticipated disposal inventory of TRU wastes destined for WIPP.** The anticipated inventory of CH-TRU and RH-TRU wastes is defined as the sum of the existing volumes of stored and currently projected waste streams at each of the TRU waste generator/storage sites. The design capacities of WIPP are calculated as follows:

   - Maximum CH-TRU capacity = 6.2 million cubic feet (~176,000 cubic meters) (Public Law 102-579, 1992),

   - RH-TRU design capacity = 7080 cubic meters ≈ 7955 canisters x 0.89 cubic meters/canister

   Scaling of the CH-TRU and RH-TRU waste projected inventories is necessary to attain the WIPP design limit. There is a high level of uncertainty in and a current lack of data on waste produced by decontamination and decommissioning (D&D) and environmental restoration (ER) activities. Therefore, the projected inventory has been scaled to the WIPP capacity (disposal inventory). The scaling of the inventory in this and future revisions of the WTWBIR is derived from the best available data and assumptions.

3. **Calculate the disposal inventory in terms of waste material parameters.** Several waste material parameters (e.g., iron-based metals/alloys, rubber, plastics, etc.) have been identified by SNL/NM as being potentially significant in relation to the performance of the WIPP repository (see Table 1-1). Calculating the WIPP disposal inventory in terms of these parameters provides input for the SPM and PA calculations and sensitivity analyses needed to determine compliance with federal standards.

1.5 TRU SYSTEM-WIDE DATA ASSUMPTIONS

As stated earlier, the WTWBIR was developed using the best available information from the TRU waste generator/storage sites. Some sites used different assumptions and methodologies for reporting its waste stream data. Because of these differences, the WTWBIR team had to make assumptions and take specific steps to ensure consistency among the sites' reported data. This section addresses the system-wide assumptions and actions taken by the WTWBIR team in rolling up the waste stream data. For a description of site-specific assumptions, see Appendix A.

1.5.1 Waste Material Parameter Assumptions

The waste material parameter information reported by the sites must be summed and averaged to obtain data at the site-specific and WIPP waste profile levels. For some waste streams, however, not all of the waste parameter data were available from the sites. In order to calculate

032

material parameters from the waste stream data provided by the sites, the following assumptions were made by the WTWBIR team:

- If only the average waste material value was provided for a specific waste stream, the average value was assigned to the minimum and maximum values.
- If the maximum value was provided and the minimum value was zero, the average value was computed as half of the maximum value.
- If only the minimum value was provided, the minimum was assigned to both the maximum and average values.
- If only the final waste form group was provided, the average set of parameters was calculated by volume averaging the parameters from other waste streams of the same final waste form group.

Waste material parameter data contained in the body of this report are based on these assumptions, whereas, individual waste stream profiles included in Appendix A contain the original, unchanged data as reported by the generator/storage sites.

1.5.2 Inventory Volume Assumptions

Other assumptions had to be made by the WTWBIR team to ensure consistency in WIPP inventory volumes:

- The volume reported for the years 1992 and 1993 was supposed to be cumulative, whereas, the values for the remaining years were to be reported as generation volume per year. Since not all of the sites reported their inventory in this manner, the WTWBIR team had to recalculate the volumes provided to attain a cubic meter/year basis for some waste stream volumes;
- Many sites did not provide final waste form volumes. Final waste form volumes are used in determining the overall WIPP inventories. In those instances, the WTWBIR team assumed that the reported, current volume would be the same as the final waste form volume.

1.5.3 Packaging Material Assumptions

The TRU waste container data was not reported consistently. While most did, many of the sites did not provide data for final form in WIPP approved containers. Some reported their waste in current containers while others did not provide container information. Adjustments had to be made to the data to:

- Achieve consistency at the waste stream level in the presentation of data in the waste stream profiles (Appendix A)
- Produce the upper-level waste packaging rollups needed by SPM/PA as inputs to the modeling activities.

Waste Profile Assumptions

The WTWBIR team assigned the TRUCON and NMVP codes based on the best available information. Each waste stream profile in Appendix A was reviewed for consistency in reporting packaging configurations. In cases where incomplete information was submitted by the TRU sites, clarifications were requested from the TRU waste generator/storage sites. In those cases where clarifications were not received from the TRU sites, the following assumptions were made, concerning the waste stream profiles:

- If the site provided final form containers, the final form containers (i.e., drums, standard waste boxes [SWB], or RH canisters) were used.
- In some cases where final waste form containers were not provided a 55-gallon drum was assumed.
- If a particular waste container was reported by the sites (but no further information was provided) or was assigned by the WTWBIR team (e.g., 55-gallon drum),"standard" values of the waste container properties (see Table 1-3) were added to the waste profile forms. An example of this process is listed below for a reported 55-gallon drum without any additional information:
  - Type of material used to fabricate the waste container (steel)
  - The internal volume of the container (0.208 m^3)
  - Inclusion of a "standard" density for the container (131 kg/ m^3).
- If sites reported a "plastic" or "rigid" liner without any further definition of the liner then the values in Table 1-3 were used in the waste stream profiles:
  - A 90-mil high density polyethylene (HDPE) liner was assumed
  - The density for that type of liner was assumed (37 kg/m^3).
- If the container fields called "Number Stored" and "Number Projects" are left blank, it is because of one of the following reasons:
  - There is a change from one type of waste container to another on the waste profile form page 2 (different internal container volumes) and therefore the number of containers stored and projected represent different volumes and a direct comparison is not possible.
  - There is an unresolved discrepancy between the number of containers and the volumes quoted on the waste stream profile. It has been assumed that the waste volumes are the most accurate information provided by the TRU waste sites.

For CH-TRU waste containers, the following assumptions were also made:

- If waste was reported in containers larger than drums, then the waste was divided into SWBs with standard plastic bag liners. The standard internal volume for SWBs (Table 1-3) and the reported waste stream volume were used to determine the number of SWBs.
- If the waste was reported in a liquid or sludge form (i.e., tanks), the WTWBIR team assumed that the waste will be placed in drums with rigid liners. No treatment volume expansion was included unless reported as such by the sites.

034

For RH-TRU waste, the following assumptions were made:

- If the waste was reported in drums, the drums were assumed to be overpacked in RH canisters at three drums per canister.
- If the waste was not reported to be in drums, the waste was assumed to be direct loaded into RH canisters. The standard internal volume for RH canisters and the reported waste stream volume were used to determine the number of RH canisters.
- The lead in the RH canister (465 kg/m^3) is assumed in the packaging rollups even if it is not stated on each RH waste stream profile.

Table 1-3. Packaging Material Assumptions

Container Configuration	Steel (kg/m^3)	Plastic (kg/m^3)	Lead (kg/m^3)	Volume (m^3)
55-gallon drum	131	37	N/A	0.208
SWB (direct load)	154	1.2	N/A	1.89
SWB (overpack) (4 55-gallon drums)	210	16	N/A	1.89
RH-TRU Canister	435	0	465	0.89
RH-TRU Canister (overpack of 3 55-gallon drums)	527	26	465	0.89

Assumptions to Produce Packaging Estimates on a System-Wide Basis

In order to add up the packaging materials for the waste as it would arrive at WIPP, the following standard container configuration was used for computing waste packaging materials from all sites. If the site provided final waste form containers, the final form containers (i.e., drums, standard waste boxes [SWB], or RH Canisters) were used, but standard liners were assumed. This was done because many sites did not provide liner information. The inclusion of standard liners produces a conservative estimate for PA and SPM calculations.

1.5.4 Radionuclide Information Assumptions

There are some waste streams from TRU waste sites which report for some waste streams incomplete radionuclide information (e.g., some show mixed fission products but no transuranic isotopes). These waste streams are expected to be demonstrated to be TRU upon completion of the radionuclide characterization.

The waste stream profiles provided in Appendix A contain waste stream specific radionuclide information, if provided by the TRU waste sites. Some sites provided only isotopic mixes, which are explained in Appendix H.

1.5.5 Comparison of IDB versus WTWBIR Waste Volumes

Differences occur between the waste volumes reported in the draft Revision 10 of the IDB (Appendix I) and those reported in Chapter 6 on a site level. Listed below is the currently-known logic for some of the differences:

- In the IDB, 40% of the INEL CH-TRU waste and 50% of the Hanford CH-TRU waste reported is assumed to be low-level waste by INEL and Hanford and is not included in the WTWBIR
- Some of the projected waste at ANL-E in the WTWBIR is accounted for in the Hanford projections. This is not the case for the IDB.
- The ANL-W waste reported for WTWBIR is included in the INEL IDB waste volumes.
- The totals for SRS CH-TRU and RH-TRU projected waste volumes in the draft Revision 10 IDB are in error. The corrected IDB total projected CH-TRU is 13,700 m^3 and for RH-TRU, 35.9 m^3.

These inconsistencies and others between the WTWBIR and IDB for TRU waste volumes is a main focus of the Revision 2 data update of the WTWBIR.

1.6 BASELINE INVENTORY UPDATES

The WTWBIR represents the best available TRU waste inventory information in support of the WIPP Project. It is anticipated that the WTWBIR will be updated periodically. This update cycle will be modified based on the availability of additional waste information or the data needs of the WIPP Project as determined by the DOE.

1.7 DOCUMENT ORGANIZATION

The WTWBIR is organized into chapters of text, figures, tables and supporting appendices. It flows from specific, detailed TRU waste information (provided by the TRU waste generator/storage sites) to the top level development and description of waste profiles and waste material parameters. The contents of remaining chapters in this document are summarized below:

- Chapter 2 discusses the methodology used to define the TRU waste disposal inventory.
- Chapter 3 outlines the methodology used to derive waste stream profiles, site-specific waste profiles, and WIPP waste profiles.
- Chapter 4 provides the WIPP disposal radionuclides inventory. The methodology used for deriving the inventories is also included.
- Chapter 5 rolls up the waste material parameter information assigned at the waste stream profile level in Chapter 3 to obtain parameter totals. These totals are presented as parameter weights per volume.
- Chapter 6 presents stored and projected CH-TRU and RH-TRU inventories by site and a system-wide rollup of CH-TRU and RH-TRU volumes.
- Chapter 7 contains a description of the WTWBID and a data dictionary.
- Chapter 8 contains a glossary of important terms used in this document.
- Chapter 9 lists references cited in the WTWBIR.
- Several appendices also are provided to either present more detailed waste inventory information or to describe the methodology in more detail. The appendices are provided in Volumes 2 and 3 of this WTWBIR.

CHAPTER 2

2. TRU WASTE DISPOSAL INVENTORY

2.1 INTRODUCTION

The TRU waste disposal inventory is derived from existing information on waste, which has been provided by the DOE TRU waste generator/storage sites and is predominately based on process knowledge. In addition to the general process knowledge of a waste stream for nonradionuclide parameters, the radionuclide inventories from the IDB TRU waste site submittals (DOE, 1994b) are derived from non-destructive assay, with some analytical analyses (to detect isotopes that do not lend themselves to non-destructive analyses or to evaluate waste streams that cannot be effectively analyzed through non-destructive methods), and on-site accountability and tracking records of special nuclear materials including any changes of isotopic ratios during processing. This chapter is designed to assist the reader by describing the existing waste information used to derive the inventory and the methodology used to correlate and combine the existing data into a WIPP disposal inventory.

2.2 SOURCE OF TRU WASTE INFORMATION

Transuranic waste information primarily exists in two forms within the DOE TRU waste system:

- On-site documentation developed by the TRU waste generator/storage sites during the history of their operations.
- Summary reports, usually prepared to support WIPP documentation requirements. These summary reports have either been generated by the DOE area office in charge of WIPP or at the DOE-Headquarters (HQ) level. The information contained in these reports is derived from the TRU waste generator/storage sites.

2.2.1 Site-Specific Waste Information

The TRU waste generator/storage sites use a variety of on-site documents and records in order to derive the information listed in the individual waste streams in Appendix A. The documents/records can include many different sources, some of which might be the following: procurement records, waste stream process manuals, operating procedures, on-site safety documentation, process diagrams, waste production records, storage records, on-site waste database management systems, interviews with existing and former workers, transportation records, waste container tracking records, on-site documentation prepared for local, state, or regional regulators. This list is not meant to be inclusive or representative of all records used at every site. It is intended to be used for example purposes only. The number and types of documents can vary greatly from site-to-site so it is impractical to list them as references in this document.

Each DOE TRU waste site was provided, by the WTWBIR team, WTWBIR Revision 0 data packages defining the characterization of each TRU waste stream at their site. The generator/storage sites reviewed, changed, and authorized the characterization as valid for use in developing the WIPP inventory.

038

2.2.2 Existing Summary Documents on TRU Waste Information

In support of various programs, the DOE has published a series of documents over the years in support of various programs which contain varying amounts of waste information. Listed below are those documents that have formed the foundation of summary TRU waste information prior to the publication of the WTWBIR.

Mixed Waste Inventory Report

The FFCAct required that the DOE, within 180 days of enactment of the FFCAct, submit to the EPA Administrator and the govemor of each state in which the DOE stores or generates mixed wastes a report that contains:

- National inventory of all mixed wastes, regardless of the time they were generated, on a state-by-state basis and
- National inventory of mixed waste treatment capacities and technologies.

The FFCAct also stipulated specific reporting requirements for each of these inventories. The DOE submitted the six-volume set entitled: *U.S. Department of Energy Interim Mixed Waste Inventory Report: Waste Streams, Treatment Capacities and Technologies*, DOE/NBM-1100, dated April 1993 (DOE, 1993c), to fulfill these requirements. Since issuance of the "interim" report, DOE has requested additional information from the DOE TRU waste generator/storage sites and published two updated reports entitled:

- *Release of Phase I Mixed Waste Inventory Report Data*, dated April 1, 1994 (Phase I MWIR) (DOE, 1994c), which includes a data diskette (Version .97B) and the draft *Mixed Waste Inventory Report Data Base System User's Guide.*
- *Distribute* [Distribution] *of the Phase II Mixed Waste Inventory Report Data*, dated May 17, 1994 (Phase II MWIR) (DOE, 1994a), which includes a data diskette (Version 1.00) and the draft *User's Guide for National Data Base System for the Final Mixed Waste Inventory Report* (May 1994).

The Phase II MWIR was the basis of the mixed waste streams that were included in Revision 0 of the WTWBIR. The DOE waste generator/storage sites have reviewed the existing waste streams from Revision 0 of the WTWBIR and have updated the information. In a very few cases mixed waste streams from the Phase II MWIR have been deleted by the generating/storage sites from Revision 1 of the WTWBIR. Any waste stream that was published in the Phase II MWIR and has a waste stream profile in the WTWBIR contains an identification code in the "MWIR ID" and "WIPP ID" fields on the waste stream profile forms (see Figure 1-2). The identification codes are assigned using the following format:

- DD-WXXX;
  - DD = Site Identification Code (from Figure 1-1)
  - XXX = Three digit numerical code assigned by DOE-HQ

Some sites have submitted "new" mixed waste streams with the Revision 1 WTWBIR datacall, which were not in the Phase II MWIR. Therefore, these waste streams have not been assigned DD-WXXX identification numbers by DOE-HQ. Those mixed TRU waste streams which have been reported for the first time in Revision 1 of the WTWBIR have been designated as:

039

- DD-MXXX (DD and XXX have same meaning as for the MWIR waste streams, except that the three digit numerical code was assigned by the WTWBIR team)

Waste streams that are nonmixed TRU waste do not appear in the Phase II MWIR. Nonmixed TRU waste streams that appear in the WTWBIR have been designated as follows:

- DD-TXXX (DD and XXX have the same meaning as for MWIR waste streams, except that the three digit numerical code was assigned by the WTWBIR team)

INEL included some nonmixed waste streams in the Phase I MWIR which had the MWIR characteristic DD-WXXX identification. These have been retained in the WTWBIR, but all other nonmixed TRU waste streams have used the DD-TXXX designation, including some "new" nonmixed waste streams from INEL.

Integrated Data Base

The IDB (DOE, 1994b) is published by Oak Ridge National Laboratory (ORNL) for the DOE. The ORNL assembles radioactive waste inventories provided by DOE TRU waste generator/storage sites. This database does not report by waste stream, but rather, by the total inventory at each DOE site. The IDB also contains the radionuclide isotopic distribution for the waste stored at each site. Because consistent reporting is not available at the waste stream level, the radionuclide information in the IDB is the basis for the Revision 1 WTWBIR inventory for radionuclides (see Chapter 4). Where sites provided radionuclide data, it is replicated in Appendix A. A WIPP disposal radionuclide inventory is provided in Table 4-2. This table is derived from unpublished IDB submittals from the TRU waste sites.

Other Sources of TRU Waste Information

There are three additional summary documents that have been produced which contain extensive information about TRU waste. The amount and form of the documentation varies between documents due to the initial purpose for including waste information. These include:

- TRUCON (DOE, 1992) - The TRUPACT-II Content (TRUCON) Code document was developed to provide waste information to the Nuclear Regulatory Commission in support of the TRUPACT-II certification application. The TRUCON concentrated on those waste parameters that were important for safe transportation of TRU waste (e.g., thermal heat loading, criticality, free liquids, etc.)
- NMVP (DOE, 1990) - The No-Migration Variance Petition (NMVP) was developed by DOE to obtain a variance from the land disposal restrictions for mixed waste as allowed under 40 CFR 268.6 (EPA, 1986). The NMVP waste information concentrated on defining the volumes of various known TRU and MTRU waste streams in the DOE system at that time, and identifying the hazardous constituents expected to be found in the MTRU waste streams. Text was provided in the NMVP on each known waste stream at that time which summarized the process knowledge and sampling and analysis information available (many WTWBIR waste streams were not defined at the time the NMVP was developed).
- WIPP RCRA Part B Permit Application (DOE, 1993b) – This document which will be revised and submitted to obtain a Part B Permit for WIPP to the State of New Mexico. This document will represent in some parts an update of the NMVP and will incorporate much information from the WTWBIR.

TRU waste streams that are included in the TRUCON and the NMVP are cross correlated, if possible, to WTWBIR waste streams in Appendix F. The designation of each waste stream in the TRUCON and NMVP, if applicable, can be found on the waste stream profile (Figure 1-2). The WTWBIR should be considered the most current source of waste stream information when there is a discrepancy in information between the WTWBIR and the TRUCON or NMVP documents.

2.3 METHODOLOGY FOR DEVELOPMENT OF DISPOSAL INVENTORY

Development of the WIPP TRU waste disposal inventory is accomplished by a series of steps starting with the individual waste streams submitted by the TRU waste generator/storage sites that are identified in Appendix A. These waste stream profiles are grouped together, based on similar physical and chemical properties, into common "WIPP waste profiles," which should facilitate discussions concerning the disposal waste inventory with regulatory agencies and stakeholders. The waste profiles also contain information on waste material parameters that could affect the performance of the WIPP repository and that may be direct inputs to the SPM and PA models. A more detailed explanation of the waste profile methodology is found in Chapter 3.

Because the existing stored and currently projected CH-TRU waste streams do not contain sufficient volume to fill the maximum allowed (designed) capacity of WIPP, scaling of the projected inventories is necessary to attain the following WIPP design inventory:

- Maximum CH-TRU design inventory = 6.2 million cubic feet (~176,000 cubic meters) (Public Law 102-579, 1992)

The anticipated inventory (as defined in Section 1.3.1) consists of 11 overall CH-TRU WIPP waste profiles based on the physical and chemical properties of the waste streams. The CH-TRU scaling factor is computed as follows:

- For CH waste:

$$\frac{\text{design inventory - stored inventory}}{\text{projected inventory}} = \text{CH-TRU scaling factor}$$

The RH-TRU anticipated inventory would be scaled using the same methodology. If the anticipated RH-TRU and CH-TRU inventories are less than the WIPP design limits, the projected inventory in future revisions of the WTWBIR will include volumes of waste anticipated from D&D and ER activities as these estimates are made available.

The disposal inventory is the total inventory to be used in SPM and PA calculations. To calculate the disposal inventory by WMCG for CH-TRU waste, the projected inventory is multiplied by the scaling factor, added to the stored inventory for each WMCG and summed together. See Section 3.3.2 for further details.

041

CHAPTER 3

3. WASTE PROFILE METHODOLOGY

3.1 WASTE STREAM PROFILE METHODOLOGY

3.1.1 Introduction

The lowest tier of information in the WTWBIR is the waste stream profile, which documents specific information for each separate TRU waste stream identified by each DOE TRU waste generator/storage site. In this chapter the waste stream profile will be discussed along with the methodology for grouping waste streams into site-specific profiles and WIPP waste profiles.

3.1.2 Waste Stream Profile Description

Each DOE TRU waste generator/storage site was provided data packages that contained the waste material parameter characterization as defined in the WIPP disposal inventory (WTWBIR, Revision 0). Each DOE site was asked to review the data packages and update the information as necessary (see Appendix D for the WTWBIR Revision 1 Questionnaire). Additionally, the sites were required to generate data packages for waste streams that were not defined. This data submittal from the DOE generator/storage sites provided approximately 360 individual TRU waste streams that were used in developing the waste stream profiles (see Appendices A and J). These waste stream profiles were developed using information from the sources listed in Section 2.2. Figure 3-1 provides an example TRU waste stream profile for an INEL waste stream.

In addition to presenting the quantity of waste material parameters in each DOE waste stream, the waste stream profile also provides a cross-reference (top of the waste stream profile form) to the different waste stream nomenclature used in previously generated DOE documents (i.e., TRUCON, NMVP). Appendix F provides a cross correlation table for a WTWBIR waste stream with the NMVP and the TRUCON. The fields utilized on the waste stream profile, the sources of the information, and a short explanation of the data located in a particular field are described in Table 3-1. A complete set of the waste stream profiles is provided in Appendices A and J. Because the West Valley Demonstration Project (WVDP) is a commercial TRU waste site, it is not part of the WIPP inventory, but the WVDP waste stream profiles are provided in Appendix J for information purposes.

The sites were not requested to provide the EPA codes as this information was derived from the Phase II MWIR. EPA codes for mixed waste streams not defined in MWIR were provided by the generator/storage site. During development of the MWIR, DOE directed the TRU waste generator/storage sites to append their hazardous waste codes (EPA codes) to further define the waste in order to develop an appropriate treatment technology. These code designations and descriptions are presented in Appendix G. For example, D003 is defined by EPA as reactive. DOE further defined this code as D003A (reactive cyanide), D003B (reactive sulfides), D003C (explosives), D003D (water reactives), and D003E (other reactives).

3.1.3 Assignment of the Waste Matrix Code Group

The DOE TRU waste generator/storage sites have assigned an overall WMC to each waste stream based on the current form of the waste. The WIPP Project has developed the WIPP WAC (DOE, 1991) for any waste packages to be shipped to WIPP to ensure the safe handling and emplacement of the waste packages in the WIPP. In general, the waste forms acceptable for emplacement in WIPP are described in Table 1-2. Each waste stream has been assigned a WMC by the TRU waste generator/storage site that defines the general physical and chemical properties of the waste.

043

044

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID	IN-W169	**STREAM NAME**	Predominantly Combustible Debris
WIPP ID	IN-W169		
Local ID	ID-EGG-114T-330	**DESCRIPTION**	Combustibles (TRU): Dry paper and rags
MATRIX CODE	5440		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Heterogeneous		
Site Matrix Description	The waste stream is from Rocky Flats Plant and primarily consists of line- and nonline-generated dry combustible materials such as paper, rags, plastics, surgical gloves, cloth overalls and booties, cardboard, wood, wood filters frames, PE bottles, and laundry lint. Some combustibles may be damp or moist. Limited amounts of noncombustibles such as glass, concrete, cement, lead glovebox gloves, batteries, and metal scrap may also be present.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 116; 216C

TRUCON CODE ID 216C

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

Figure 3-1. Example of TRU Wsate Stream Profile From Idaho National Engineering Laboratory

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

IN-W169

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 20822
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	36.8	0.0	233.0
Other Inorganic Materials	27.2	0.0	196.0
Cellulosics	135.0	6.6	817.0
Rubber	57.2	0.0	330.0
Plastics	188.0	14.8	887.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

10% of this waste stream volume is classified as RH-TRU without current shielding. It is anticipated that the RH-TRU portion will be shipped as CH-TRU with internal shielding.

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4331.0	4331.0	m3
End of 1993:	4331.0	4331.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008A
D008C
D022
D029
F001
F002
F003
F005
F005A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	3.79E-01	Curies/m3
Pu52	4.39E+00	Curies/m3
U235	2.59E-06	Curies/m3
U238	8.48E-11	Curies/m3

Figure 3-1. Example of TRU Wsate Stream Profile From Idaho National Engineering Laboratory (continued)

TABLE 3-1. SOURCES OF INFORMATION USED IN WASTE STREAM PROFILES

Information Field	Source of Information	Explanation
PAGE 1 OF WASTE STREAM PROFILE		
SITE NAME	TRU waste sites	Storage site for existing waste; Generating site for projected waste
Waste Type	TRU waste sites	MTRU – mixed TRU – nonmixed
Handling	TRU waste sites	CH – Contact-Handled RH – Remote-Handled
Generator Site	TRU waste sites	TRU waste site that originally generated waste
WASTE STREAM MWIR ID	DOE–HQ	MWIR identification code assigned
WASTE STREAM WIPP ID	WTWBIR	MWIR ID used if available; new mixed WS "–MXXX"; nonmixed WS "–TXXX"
WASTE STREAM Local ID	TRU waste sites	On–site ID used at TRU waste sites
STREAM NAME	TRU waste sites	Usual name used to identify waste stream by TRU waste site
DESCRIPTION	TRU waste sites	Short description of waste generating process
MATRIX CODE	TRU waste sites	Physical/chemical waste matrix code assigned by each TRU waste site from MWIR (DOE, 1993a)
Waste Matrix Code Group	TRU waste sites and/or WTWBIR	Grouping of wastes in 11 WIPP profiles (see Table 1-2)
Site Matrix Description	TRU waste sites	Usually a description of the physical/chemical matrix of WS
NO–MIGRATION VARIANCE PETITION ASSIGNMENT	TRU waste sites and/or WTWBIR	If applicable, what a waste stream is called in the NMVP

046

Table 3-1. SOURCES OF INFORMATION USED IN WASTE STREAM PROFILES (continued)

Information Field	Source of Information	Explanation
TRUCON CODE	TRU waste sites and/or WTWBIR	If applicable, what a waste stream is called in the TRUCON
CHECK OFF BOXES	TRU waste sites	Categorization fields for TRU waste stream
Comments	TRU waste sites	Lists comments/assumptions provided by TRU waste sites on the waste description.
Footnotes	WTWBIR	Explain data provided by the TRU waste generator/storage site and/or list assumptions made by WTWBIR.
PAGE 2 OF WASTE STREAM PROFILE		
SITE NAME Waste Type Handling Generator Site	TRU waste sites	Same as Page 1 of form
CONTAINER	TRU waste sites	Type of waste container that information on page two is based on (e.g., Drum)
CONTAINER Container Matl	TRU waste sites	Type of material that a waste container is constructed from (e.g., steel)
CONTAINER Liner Type	TRU waste sites	Description of the liner, if used in the waste container (e.g., rigid, plastic liner bags)
CONTAINER Type/Size	TRU waste sites	Common designation for size (e.g., 55–gallon)
CONTAINER Int. Vol/Ctnr	TRU waste sites	Internal volume of empty waste container
CONTAINER Liner Material	TRU waste sites	Type of material that a liner is constructed from (e.g., HDPE)
CONTAINER Number Stored	TRU waste sites	Number of containers stored as of last data call (for Revision 1 = end of 1993)
CONTAINER Number Projected	TRU waste sites	Number of containers projected to be produced from 1994– 2022

Table 3-1. SOURCES OF INFORMATION USED IN WASTE STREAM PROFILES (continued)

Information Field	Source of Information	Explanation
MATERIAL PARAMETERS	TRU waste sites	Record the "Upper Limit"; "Lower Limit"; and "Average" in kg/m^3 for each waste material parameter, if known
STORED TRU WASTE AND ESTIMATED RATES OF WASTE GENERATION	TRU waste sites	Provides estimate of stored volumes of waste at the "End of 1992"; "End of 1993" and estimated projections for waste generation. Information is recorded for waste stream volumes as stored or generated and in terms of "final volume" for shipment to WIPP.
TYPICAL ISOTOPIC COMPOSITION	TRU waste sites	Provides estimate of "typical" radionuclide concentration expected in waste stream in a curies/m^3 basis; if concentrations are unknown, only isotopes may be listed.
TYPICAL EPA CODES APPLICABLE	MWIR or TRU generator/storage site	Identifies the applicable EPA codes for waste for as it exists at sites;.
COMMENTS	TRU waste sites	Lists comments/assumptions on the container information provided by TRU waste sites.
FOOTNOTES	WTWBIR	Explain data provided by TRU waste generating/storage sites and/or list assumptions made by the WTWBIR.

The WMC is located on the first page of each waste stream profile. The assignment of the WMC is based on DOE guidance document (DOE, 1993a).

For the purpose of this document, TRU waste generator/storage sites were requested to provide WMCGs for final waste forms; that is, after the sites process, treat, or repackage the waste. The WMCG is indicated on page 1 of the waste stream profile. For most waste stream profiles, the TRU waste generator/storage sites have provided estimates of the waste material parameters (e.g., an INEL waste stream profile is used for illustrative purposes in Figure 3-1). However, in some cases the TRU waste generator/storage sites were unable to provide waste material parameter values for some waste streams. This resulted in two possible changes to the overall methodology presented in this chapter:

- In many cases the TRU waste generator/storage site could categorize the waste stream profile into one of the final 11 WIPP WMCGs (Table 1-2) but could not give any waste material parameter information. In these cases, the WTWBIR assumes the same range and average waste material parameters for the particular WIPP waste profile. For example, if a salt waste stream did not contain any waste material parameter information, but has been

048

identified by a TRU waste generator/storage site as being a salt waste form, then the volume of that waste stream was added to the total volume of all other salt waste streams.

- In a few cases, TRU waste generator/storage sites were unable to categorize a TRU waste stream into one of the final WIPP WMCGs (Table 1-2). In these cases the waste stream profile is placed in the "unknown" category. The "unknown" waste streams are documented as part of the WIPP inventory, but are not used in any of the scaling of CH-TRU waste volumes necessary to fill WIPP to its design capacity. "Unknown" wastes will have to be characterized and may require treatment prior to emplacement in WIPP.

The TRU waste generator/storage sites have identified several waste streams that are regulated under the Toxic Substances Control Act (TSCA) (i.e., containing asbestos or polychlorinated biphenyls [PCBs]). Because the concentration of the asbestos and/or PCBs is unknown, it is assumed that these waste streams cannot be accepted at WIPP under the proposed draft WIPP RCRA Part B Permit Application. These waste streams are summarized in Table 3-2 and are not included in the WTWBIR.

3.2 SITE-SPECIFIC WASTE PROFILE METHODOLOGY

Waste streams at each TRU waste generator/storage site with similar WMCs can be grouped together into WMCGs (Table 1-2) for a site-specific waste profile. The methodology for grouping waste streams from two different generator/storage sites is shown in Figure 3-2. The grouping of individual waste stream profiles into a site-specific waste profile is based on the similar physical and chemical properties of the waste streams and how that information is used in the SPM and PA models. In the example in Figure 3-2, due to their similar mechanical properties, concrete waste, glass waste, firebrick waste, and ceramic waste mainly influence the estimation of porosity and permeability in the SPM/PA calculations. Therefore, the three waste streams at DOE TRU Waste Site #1 and the two at DOE TRU Waste Site #2 can be grouped together at each site based on similar physical and chemical properties and placed into the site-specific waste profile "inorganic non-metal" waste, with the WMCG defined in Table 1-2.

A site-specific waste profile is developed at each of the TRU waste generator/storage sits for each of the WMCGs that have individual waste streams at the site. These site-specific waste profiles provide a roll-up of the waste material parameter and volume information found in the waste stream profiles for each site. Since there are 11 WMCGs, there are a maximum of 11 possible CH-TRU and 11 possible RH-TRU site-specific waste profiles at any generator/storage site; however, most sites have fewer profiles due to differences in waste segregation practices. An example site-specific waste profile is provided in Figure 3-3. Table 3-3 lists the sources of information for site-specific waste profiles. All the site-specific waste profiles for TRU waste are provided in Appendix B.

3.3 WIPP WASTE PROFILE METHODOLOGY

3.3.1 Introduction and Methodology

The WIPP waste profiles are the highest tier of information in the WTWBIR. Site-specific waste profiles with the same WMCGs are combined across the TRU waste generator/storage sites into what is defined as an overall WIPP waste profile.

049

TABLE 3-2. TOXIC SUBSTANCES CONTROL ACT (TSCA) TRU WASTE

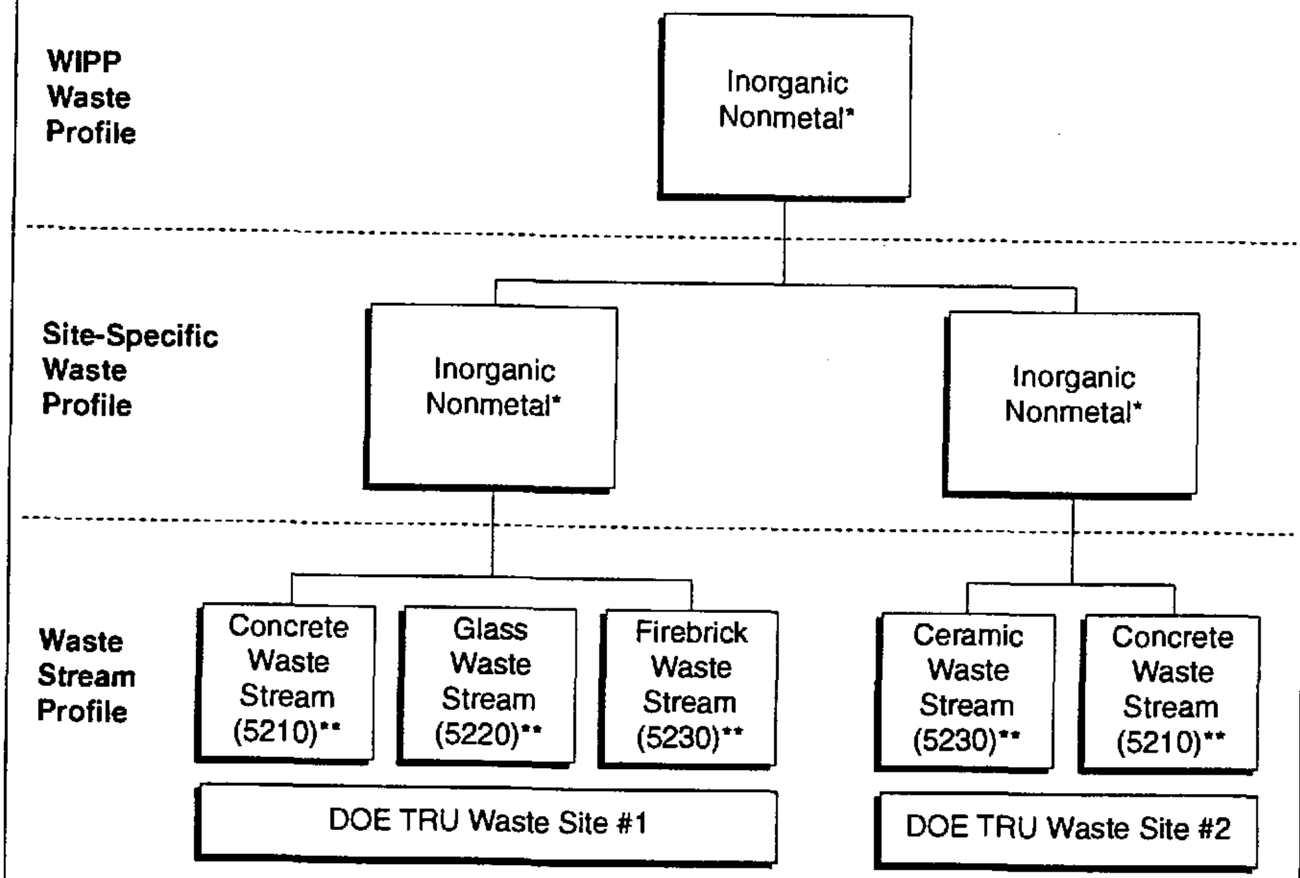
WIPP ID	WASTE STREAM NAME	ASBESTOS	PCBs
IN-W309	Absorbed Organic Liquids	No	Yes
MD-W002	Absorbed Aqueous Liquids	No	Yes
LL-T005	HEPA filters	Yes	No
MD-M001	Asbestos Debris	Yes	No
MD-T013	Leaded gloves/aprons	No	Yes
MD-T008	Uncategorized plastics/rubber debris	No	Yes
MD-T012	Uncategorized heterogeneous debris	Yes	No
RL-M005	TRU Mixed Inorganic Homogeneous Solids with Mercury	No	Yes
RL-M021	TRU Mixed Inorganic Debris PCBs with Mercury	No	Yes
RL-M022	TRU Mixed Leaded Gloves/Aprons PCBs with Mercury	No	Yes
RL-M023	TRU Mixed Organic Debris PCBs with IGN, CORR, REAC	No	Yes
RL-M024	TRU Mixed Organic Labpacks with PCBs	No	Yes
RL-T030	Non-mixed Inorganic Debris with PCBs	No	Yes

As described in Sections 3.1 and 3.2, each waste stream from each TRU waste generator/storage site is defined in a waste stream profile, then grouped by site WMCGs into site-specific waste profiles. These site-specific waste profiles are then rolled-up into WIPP waste profiles by combining identical WMCGs from all the TRU waste generator/storage sites. For example, all site-specific waste profiles for "inorganic non-metal" waste are grouped together to generate the WIPP waste profile, "inorganic non-metal" waste. The WIPP waste profiles are presented in Figures 3-4 through 3-23 at the end of this chapter.

3.3.2 WIPP Waste Profile Roll-Ups

To illustrate the methodology for grouping similar site-specific waste profiles into WIPP waste profiles, the WIPP waste profile for "inorganic non-metal" waste (exemplified in Figure 3-2) is provided in Figure 3-8. As with site-specific waste profiles, there can be a maximum of 11 possible WIPP waste profiles for CH-TRU and 11 possible WIPP waste profiles for RH-TRU

050



* See Table 1-2 for WMCs that can occur in each WMCG
** Waste Matrix Code

Figure 3-2. Schematic of Waste Stream Profile Methodology.

051

Site-Specific Contact Handled Waste Profiles

Site Name: INEL

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total per Stream (m3)
IN-W169	4331	0	4331
IN-W170	0.44	1	1.44
IN-W171	3.6	0	3.6
IN-W172	165.57	0	165.57
IN-W186	2695.1	0	2695.1
IN-W189	8.2	0	8.2
IN-W197	632.7	0	632.7
IN-W203	71.9	0	71.9
IN-W204	3.2	0	3.2
IN-W225	6.1	0	6.1
IN-W259	58.8	0	58.8
IN-W265	47.8	0	47.8
IN-W269A	34.8	0	34.8
IN-W271	0.42	0	0.42
IN-W281	348	0	348
IN-W283	1	0	1
IN-W285	85	0	85
IN-W289	25.4	0	25.4
IN-W291	639	0	639
IN-W302	144.1	0	144.1
IN-W306.3	322.67	0	322.67
IN-W329	1.14	0	1.14
IN-W334	7.48	0	7.48

Figure 3-3; Example of Site Specific Waste Profile

052

Site-Specific Contact Handled Waste Profiles

IN-W345	14.6	0	14.6
IN-W351	1.48	0	1.48
Total Volume:	**9649.5**	**1**	**9650.5**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	1634.6	38.0	0.0
	Aluminum Based	38.2	1.2	0.0
	Other Metals	233.0	17.2	0.0
	Other Inorganics	1442.3	17.9	0.0
Organics	Cellulose	961.5	245.1	0.0
	Rubber	330.0	43.7	0.0
	Plastics	887.0	148.1	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		144.2	0.2	0.0

Figure 3-3 (cont); Example of Site Specific Waste Profile

053

TABLE 3-3. SOURCES OF INFORMATION USED IN SITE-SPECIFIC WASTE PROFILES

Information Field	Source of Information	Explanation
DOE TRU Site	TRU Waste Sites	The code for the DOE site. Codes are as follows: AL – Ames Laboratory AE – Argonne National Laboratory - East AW – Argonne National Laboratory - West BC – Battelle Columbus BT – Bettis Atomic Power Laboratory ET – Energy Technology Engineering Center IN – Idaho National Engineering Laboratory IT – Inhalation Toxicology Research Institute KA – Knolls Atomic Power Laboratory - Schenectady LA – Los Alamos National Laboratory LB – Lawrence Berkeley Laboratory LL – Lawrence Livermore National Laboratory MD – Mound Plant MU – University of Missouri NT – Nevada Test Site OR – Oak Ridge National Laboratory PA – Paducah Gaseous Diffusion Plant PX – Pantex Plant RF – Rocky Flats Environmental Technology Site RL – Richland (Hanford) Site SA – Sandia National Laboratories/NM SR – Savannah River Site WV – West Valley Demonstration Project
WMCG	WTWBIR or TRU waste sites	Groups waste streams that have similar chemical and physical properties (see Table 1-2).
Waste Stream Volume	TRU waste sites	Provides estimates of retrievably stored, projected, and total volumes of TRU and mixed TRU wastes by waste stream.
Waste Material Parameters	TRU waste sites	Provides total density estimates of selected waste materials in a particular WMCG for the entire site.

waste. Table 3-4 lists the sources of information used for the WIPP waste profiles. Using volumes for all the TRU waste streams (including the mixed and non-mixed TRU waste volumes) in the WTWBID, a disposal inventory of TRU waste has been developed using the methodology described in this and the preceding sections. This inventory is presented in Table 3-5 (by WMCGs) and depicts both the anticipated and disposal inventory volumes.

054

TABLE 3-4. SOURCES OF INFORMATION USED IN WIPP WASTE PROFILES

Information Field	Source of Information	Explanation
Waste Matrix Code Group (WMCG)	WTWBIR or TRU waste sites	Groups waste streams that have similar chemical and physical properties (Table 1-2)
DOE Site Volumes	TRU waste sites	Provides estimates of retrievably stored, projected, and total volumes of TRU and TRU mixed wastes by DOE site
Waste Material Parameters	TRU waste sites	Provides weight estimates of selected waste materials in a particular WMCG for the DOE Complex

The anticipated CH-TRU inventory volumes are the sum of the "stored" and "projected" volumes in Table 3-5. The procedure to scale to the disposal inventory is summarized below:

- The target design volume of CH-TRU waste beyond that identified by the generator/storage sites is decreased by the "unknown" waste volume (176,000 - 1700 = 176,000 [there is no significant increase due to rounding]).

The "unknown" volume of waste in Table 3-5 is subtracted from the stored inventory and from the projected inventory.

- The "unknown" waste will have to be added back into the total scaled inventory because it is assumed that this waste will be characterized and then shipped to WIPP.
- Applying a modified version of the formula given in Section 2.3:

$$\frac{\underset{\text{(modified design inventory)}}{1.76 \times 10^5} - \underset{\text{(modified stored inventory)}}{7.13 \times 10^4}}{5.1 \times 10^4 \text{ (modified projected inventory)}} \approx 2.05 \text{ (scaling factor)}$$

- Multiply the CH-TRU waste projected inventory volumes by the scaling factor 2.05 for all the WMCGs, except for the "unknown" waste and add the stored volumes (which results in the numbers in the "Disposal Inventory" column of Table 3-5).
- Add the CH-TRU waste volumes in the fourth column, including the "unknown" waste, to attain the estimated WIPP disposal inventory volume).

The CH-TRU waste stream volume on a system-wide WMCG basis is increased by 42 percent to account for the difference between the anticipated inventory and the repository design limit.

A similar methodology has been developed to scale the RH-TRU inventory. The anticipated RH-TRU inventory volumes are the sum of the "stored" and "projected" volumes in Table 3-5. The procedure to scale to the disposal inventory is summarized below:

- The target design volume of RH-TRU waste beyond that identified by the generator/storage sites is decreased by the "unknown" waste volume (7080 - 35 = 7045).

The "unknown" volume of waste in Table 3-5 is subtracted from the stored inventory and from the projected inventory.

- The "unknown" waste will have to be added back into the total scaled inventory because it is assumed that this waste will be characterized and then shipped to WIPP.
- Applying a modified version of the formula given in Section 2.3:

$$\frac{\underset{\text{(modified design inventory)}}{7045} - \underset{\text{(modified stored inventory)}}{1158}}{3595 \text{ (modified projected inventory)}} \approx 1.64 \text{ (scaling factor)}$$

- Multiply the RH-TRU waste projected inventory volumes by the scaling factor 1.64 for all the WMCGs, except for the "unknown" waste and add the stored volumes (which results in the numbers in the "Disposal Inventory" column of Table 3-5).
- Add the RH-TRU waste volumes in the fourth column, including the "unknown" waste, to attain the estimated WIPP disposal inventory volume).

The RH-TRU waste stream volume on a system-wide WMCG basis is increased by 48 percent to account for the difference between the anticipated inventory and the repository design limit.

Table 3-5

TRANSURANIC WASTE DISPOSAL INVENTORY FOR WIPP

Contact Handled Waste

(Cubic Meters)

Waste Matrix Groups	Stored Volumes	Projected Volumes	Anticipated Volumes	WIPP Disposal Volumes
Combustible	7.1E+03	2.7E+04	3.4E+04	6.2E+04
Filter	4.3E+02	1.1E+03	1.5E+03	2.6E+03
Graphite	6.7E+02	4.3E+01	7.1E+02	7.6E+02
Heterogeneous	3.0E+04	4.6E+03	3.5E+04	3.9E+04
Inorganic Non-metal	1.2E+03	3.2E+02	1.5E+03	1.8E+03
Lead/Cadmium Metal Waste	5.6E+01	1.3E+02	1.8E+02	3.1E+02
Salt Waste	3.3E+01	6.0E+01	9.2E+01	1.5E+02
Soils	3.7E+02	4.5E+02	8.3E+02	1.3E+03
Solidified Inorganics	1.7E+04	8.0E+03	2.5E+04	3.4E+04
Solidified Organics	1.5E+03	3.0E+02	1.8E+03	2.1E+03
Uncategorized Metal	1.2E+04	8.6E+03	2.1E+04	3.0E+04
Unknown	1.7E+03	0.0E+00	1.7E+03	1.7E+03
Total CH Volumes	**7.3E+04**	**5.1E+04**	**1.2E+05**	**1.8E+05**
Remote Handled Waste				
Combustible	1.5E+01	3.2E+00	1.8E+01	2.0E+01
Filter	8.9E-01	2.1E+00	3.0E+00	4.3E+00
Heterogeneous	4.4E+02	3.3E+03	3.8E+03	5.9E+03
Lead/Cadmium Metal Waste	0.0E+00	6.0E+00	6.0E+00	9.8E+00
Salt Waste	0.0E+00	2.8E+00	2.8E+00	4.6E+00
Solidified Inorganics	6.1E+02	1.7E+02	7.9E+02	9.0E+02
Uncategorized Metal	8.8E+01	8.6E+01	1.7E+02	2.3E+02
Unknown	1.1E+01	2.4E+01	3.5E+01	3.5E+01
Total RH Volumes	**1.2E+03**	**3.6E+03**	**4.8E+03**	**7.1E+03**
Total TRU Waste Volumes	**7.4E+04**	**5.4E+04**	**1.3E+05**	**1.8E+05**

057

WIPP Contact Handled Waste Profiles

Final Waste Form: Combustible

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
INEL	670.90	0.00	670.90
LANL	1768.33	2464.60	4232.93
MOUND	5.61	0.00	5.61
HANFORD	526.48	12269.03	12795.51
LLNL	48.88	372.32	421.20
SRS	4066.80	11962.50	16029.30
Total Volume	7087.00	27068.45	34155.45

		Material Parameters (Kg/m3)		
		Maximum	Average	Minimum
Inorganics	**Iron Based**	1048.3	41.8	0.0
	Aluminum Based	1048.3	2.5	0.0
	Other Metals	474.5	3.0	0.0
	Other Inorganics	200.0	2.6	0.0
Organics	**Cellulose**	961.5	288.0	0.0
	Rubber	629.0	33.0	0.0
	Plastics	850.5	90.0	0.0
Solidified Materials	**Inorganic**	100.0	0.1	0.0
	Organic	100.0	0.1	0.0
Soils		192.7	2.1	0.0

Figure 3 - 4
WIPP CH-TRU Waste Profile for Final Waste Form Combustible

058

WIPP Contact Handled Waste Profiles

Final Waste Form: Filter

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
INEL	323.56	0.00	323.56
RFP	103.96	1087.59	1191.55
Total Volume	**427.52**	**1087.59**	**1515.11**

		Material Parameters (Kg/m3)		
		Maximum	*Average*	*Minimum*
Inorganics	**Iron Based**	595.3	6.7	0.0
	Aluminum Based	440.7	11.9	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	500.0	72.9	0.0
Organics	**Cellulose**	496.1	15.9	0.0
	Rubber	11.3	0.6	0.0
	Plastics	596.6	21.2	0.0
Solidified Materials	**Inorganic**	427.6	42.6	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Figure 3 - 5
WIPP CH-TRU Waste Profile for Final Waste Form Filter

057

WIPP Contact Handled Waste Profiles

Final Waste Form: Graphite

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
INEL	650.70	0.00	650.70
RFP	18.06	43.40	61.46
Total Volume	668.76	43.40	712.16

		Material Parameters (Kg/m3)		
		Maximum	Average	Minimum
Inorganics	**Iron Based**	17.3	0.7	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.3	0.0	0.0
	Other Inorganics	468.0	237.1	16.9
Organics	**Cellulose**	9.8	3.8	0.0
	Rubber	0.0	0.0	0.0
	Plastics	51.4	4.3	0.0
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Figure 3 - 6
WIPP CH-TRU Waste Profile for Final Waste Form Graphite

060

WIPP Contact Handled Waste Profiles

Final Waste Form: Heterogeneous

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
LBL	0.84	4.42	5.26
INEL	9649.50	1.00	9650.50
ORNL	672.98	263.90	936.88
HANFORD	8568.55	827.16	9395.71
NTS	619.50	0.00	619.50
KAPL	2.40	0.00	2.40
MOUND	0.42	0.00	0.42
BT	0.00	123.82	123.82
ETEC	1.66	5.20	6.86
PANTEX	0.62	0.00	0.62
RFP	312.86	804.58	1117.44
SRS	10132.20	2563.60	12695.80
SNL/NM	8.04	7.00	15.04
ANL-W	0.00	3.36	3.36
MU	0.06	1.60	1.66
Total Volume	29969.63	4605.64	34575.27

Figure 3 - 7
WIPP CH-TRU Waste Profile for Final Waste Form Heterogeneous

WIPP Contact Handled Waste Profiles

		Material Parameters (Kg/m3)		
		Maximum	**Average**	**Minimum**
Inorganics	**Iron Based**	1716.4	168.4	0.0
	Aluminum Based	512.0	30.5	0.0
	Other Metals	850.0	5.0	0.0
	Other Inorganics	2100.0	16.9	0.0
Organics	**Cellulose**	961.5	301.7	0.0
	Rubber	681.8	39.7	0.0
	Plastics	887.0	123.6	0.0
Solidified Materials	**Inorganic**	177.0	2.9	0.0
	Organic	400.0	0.2	0.0
Soils		865.8	2.7	0.0

Figure 3 - 7
WIPP CH-TRU Waste Profile for Final Waste Form Heterogeneous

WIPP Contact Handled Waste Profiles

Final Waste Form: Inorganic Non-metal

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
INEL	1052.89	0.00	1052.89
RFP	110.68	318.68	429.36
Total Volume	1163.57	318.68	1482.25

		Material Parameters (Kg/m3)		
		Maximum	**Average**	**Minimum**
Inorganics	**Iron Based**	23.8	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	13.1	0.2	0.0
	Other Inorganics	1250.0	214.3	0.0
Organics	**Cellulose**	850.0	41.9	0.0
	Rubber	8.7	0.4	0.0
	Plastics	69.9	13.6	0.0
Solidified Materials	**Inorganic**	69.9	3.7	0.0
	Organic	8.3	0.0	0.0
Soils		865.8	0.4	0.0

Figure 3 - 8
WIPP CH-TRU Waste Profile for Final Waste Form Inorganic Non-metal

063

WIPP Contact Handled Waste Profiles

Final Waste Form: Lead/Cadmium Metal Waste

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
ANL-E	1.10	0.00	1.10
ANL-W	0.02	2.48	2.50
ETEC	0.21	0.00	0.21
RFP	51.87	124.18	176.05
HANFORD	3.13	0.29	3.42
Total Volume	56.33	126.95	183.28

		Material Parameters (Kg/m3)		
		Maximum	**Average**	**Minimum**
Inorganics	**Iron Based**	256.1	0.6	0.0
	Aluminum Based	27.8	0.1	0.0
	Other Metals	1438.3	45.3	0.0
	Other Inorganics	370.1	166.3	0.0
Organics	**Cellulose**	264.0	7.8	0.0
	Rubber	217.3	98.5	0.0
	Plastics	86.7	15.4	0.0
Solidified Materials	**Inorganic**	237.0	2.5	0.0
	Organic	0.0	0.0	0.0
Soils		77.0	0.4	0.0

Figure 3 - 9
WIPP CH-TRU Waste Profile for Final Waste Form Lead/Cadmium Metal Waste

064

WIPP Contact Handled Waste Profiles

Final Waste Form: Salt Waste

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
RFP	9.45	56.60	66.05
INEL	22.91	0.00	22.91
LLNL	0.62	2.91	3.54
Total Volume	32.98	59.51	92.50

		Material Parameters (Kg/m3)		
		Maximum	**Average**	**Minimum**
Inorganics	**Iron Based**	100.0	20.1	0.0
	Aluminum Based	80.0	0.2	0.0
	Other Metals	212.0	8.4	0.0
	Other Inorganics	719.1	239.2	2.9
Organics	**Cellulose**	50.0	1.0	0.0
	Rubber	20.0	0.0	0.0
	Plastics	100.0	1.9	0.0
Solidified Materials	**Inorganic**	10.0	0.0	0.0
	Organic	10.0	0.0	0.0
Soils		0.0	0.0	0.0

Figure 3 - 10
WIPP CH-TRU Waste Profile for Final Waste Form Salt Waste

065

WIPP Contact Handled Waste Profiles

Final Waste Form: Soils

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
HANFORD	111.69	309.27	420.96
INEL	3.80	0.00	3.80
MOUND	146.88	0.00	146.88
LANL	109.37	144.60	253.97
Total Volume	371.74	453.87	825.61

		Material Parameters (Kg/m3)		
		Maximum	**Average**	**Minimum**
Inorganics	**Iron Based**	38.8	1.4	0.0
	Aluminum Based	38.8	0.3	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	33.9	0.0	0.0
Organics	**Cellulose**	67.3	7.2	0.0
	Rubber	210.4	1.8	0.0
	Plastics	132.2	32.9	0.0
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		1600.0	644.4	17.8

Figure 3 - 11
WIPP CH-TRU Waste Profile for Final Waste Form Soils

066

WIPP Contact Handled Waste Profiles

Final Waste Form: Solidified Inorganics

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
SRS	0.04	0.00	0.04
ANL-E	23.05	1.12	24.17
RFP	228.63	2988.11	3216.74
PA	3.45	0.00	3.45
ORNL	110.00	0.00	110.00
LANL	4848.38	2059.03	6907.41
MOUND	7.28	0.00	7.28
HANFORD	1.46	2924.76	2926.22
INEL	12164.28	0.00	12164.28
LLNL	13.30	66.15	79.45
AMES LAB	0.00	0.10	0.10
Total Volume	17399.87	8039.27	25439.14

		Material Parameters (Kg/m3)		
		Maximum	Average	Minimum
Inorganics	**Iron Based**	153.9	9.5	0.0
	Aluminum Based	153.9	1.1	0.0
	Other Metals	20.0	0.4	0.0
	Other Inorganics	1122.0	106.4	0.0
Organics	**Cellulose**	100.0	0.9	0.0
	Rubber	20.0	0.8	0.0
	Plastics	100.0	3.4	0.0
Solidified Materials	**Inorganic**	2180.0	634.7	0.0
	Organic	1357.0	12.8	0.0
Soils		0.0	0.0	0.0

Figure 3 - 12
WIPP CH-TRU Waste Profile for Final Waste Form Solidified Inorganics

067

WIPP Contact Handled Waste Profiles

Final Waste Form: Solidified Organics

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
RFP	132.80	48.82	181.62
INEL	912.60	0.00	912.60
ANL-E	0.03	0.00	0.03
SRS	404.85	240.70	645.55
HANFORD	2.17	15.25	17.42
Total Volume	1452.45	304.77	1757.21

		Material Parameters (Kg/m3)		
		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	728.3	340.8	0.0
Organics	Cellulose	42.9	0.2	0.0
	Rubber	0.0	0.0	0.0
	Plastics	121.1	3.1	0.0
Solidified Materials	Inorganic	528.8	34.4	0.0
	Organic	1072.0	398.4	0.0
Soils		0.0	0.0	0.0

Figure 3 - 13
WIPP CH-TRU Waste Profile for Final Waste Form Solidified Organics

068

WIPP Contact Handled Waste Profiles

Final Waste Form: Uncategorized Metal

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
INEL	7564.09	0.00	7564.09
ANL-E	4.96	0.56	5.52
MOUND	102.28	0.00	102.28
RFP	164.82	429.50	594.32
LANL	4134.80	3006.17	7140.97
LLNL	144.33	247.00	391.33
HANFORD	103.35	4890.95	4994.30
Total Volume	12218.62	8574.18	20792.80

		Material Parameters (Kg/m3)		
		Maximum	Average	Minimum
Inorganics	Iron Based	2096.0	129.1	0.0
	Aluminum Based	915.3	12.7	0.0
	Other Metals	1057.7	146.5	0.0
	Other Inorganics	812.5	11.2	0.0
Organics	Cellulose	500.0	14.0	0.0
	Rubber	245.6	1.0	0.0
	Plastics	750.8	13.7	0.0
Solidified Materials	Inorganic	300.0	0.0	0.0
	Organic	300.0	0.0	0.0
Soils		48.7	0.2	0.0

Figure 3 - 14
WIPP CH-TRU Waste Profile for Final Waste Form Uncategorized Metal

069

WIPP Contact Handled Waste Profiles

Final Waste Form: Unknown

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
INEL	1655.91	0.00	1655.91
Total Volume	**1655.91**	**0.00**	**1655.91**

		Material Parameters (Kg/m3)		
		Maximum	**Average**	**Minimum**
Inorganics	**Iron Based**	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	0.0	0.0	0.0
Organics	**Cellulose**	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Figure 3 - 15
WIPP CH-TRU Waste Profile for Final Waste Form Unknown

070

WIPP Remote Handled Waste Profiles

Final Waste Form: Combustible

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
LANL	14.84	3.16	18.00
Total Volume	**14.84**	**3.16**	**18.00**

	Materials	Material Parameters (Kg/m3) Maximum	Average	Minimum
Inorganics	**Iron Based**	265.2	257.7	254.0
	Aluminum Based	0.4	0.4	0.4
	Other Metals	89.7	18.8	18.8
	Other Inorganics	6.8	6.8	6.8
Organics	**Cellulose**	68.7	64.0	59.2
	Rubber	1.2	1.1	1.0
	Plastics	5.7	5.3	4.9
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Figure 3 - 16
WIPP RH-TRU Waste Profile for Final Waste Form Combustible

071

WIPP Remote Handled Waste Profiles

Final Waste Form: Filter

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
ANL-W	0.89	2.09	2.98
Total Volume	0.89	2.09	2.98

	Materials	Material Parameters (Kg/m3) Maximum	Average	Minimum
Inorganics	**Iron Based**	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	241.2	232.5	214.9
Organics	**Cellulose**	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	8.8	8.8	8.8
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Figure 3 - 17
WIPP RH-TRU Waste Profile for Final Waste Form Filter

072

WIPP Remote Handled Waste Profiles

Final Waste Form: Heterogeneous

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
INEL	13.63	2.80	16.43
ANL-W	0.59	0.08	0.67
BCLDP	0.00	71.00	71.00
BT	0.00	1.56	1.56
HANFORD	33.16	2973.71	3006.87
SRS	0.00	63.92	63.92
KAPL	11.23	25.23	36.46
ORNL	382.81	182.70	565.51
Total Volume	441.43	3321.00	3762.42

		Material Parameters (Kg/m3)		
	Materials	**Maximum**	**Average**	**Minimum**
Inorganics	**Iron Based**	1716.4	108.5	0.0
	Aluminum Based	263.0	23.0	0.0
	Other Metals	500.0	0.2	0.0
	Other Inorganics	2000.0	38.6	0.0
Organics	**Cellulose**	961.5	34.3	0.0
	Rubber	163.5	5.9	0.0
	Plastics	550.0	30.7	0.0
Solidified Materials	**Inorganic**	15.0	0.1	0.0
	Organic	3.0	0.0	0.0
Soils		193.0	2.3	0.0

Figure 3 - 18
WIPP RH-TRU Waste Profile for Final Waste Form Heterogeneous

073

WIPP Remote Handled Waste Profiles

Final Waste Form: Lead/Cadmium Metal Waste

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
ANL-W	0.00	0.36	0.36
INEL	0.00	5.60	5.60
Total Volume	0.00	5.96	5.96

	Materials	Material Parameters (Kg/m3) Maximum	Average	Minimum
Inorganics	Iron Based	256.1	12.0	0.0
	Aluminum Based	27.8	1.3	0.0
	Other Metals	109.6	43.6	0.0
	Other Inorganics	754.8	165.7	1.2
Organics	Cellulose	45.3	7.7	0.0
	Rubber	190.4	92.3	0.0
	Plastics	67.6	15.1	0.0
Solidified Materials	Inorganic	619.2	5.9	0.0
	Organic	0.0	0.0	0.0
Soils		1.2	0.4	0.0

Figure 3 - 19
WIPP RH-TRU Waste Profile for Final Waste Form Lead/Cadmium Metal Waste

WIPP Remote Handled Waste Profiles

Final Waste Form: Salt Waste

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
INEL	0.00	2.80	2.80
Total Volume	**0.00**	**2.80**	**2.80**

	Materials	Material Parameters (Kg/m3) Maximum	Average	Minimum
Inorganics	Iron Based	28.6	20.1	3.7
	Aluminum Based	3.1	0.2	0.0
	Other Metals	16.9	8.4	1.6
	Other Inorganics	591.1	239.2	106.3
Organics	Cellulose	3.8	1.0	0.0
	Rubber	0.8	0.0	0.0
	Plastics	5.2	1.9	1.1
Solidified Materials	Inorganic	0.4	0.0	0.0
	Organic	0.4	0.0	0.0
Soils		0.0	0.0	0.0

Figure 3 - 20
WIPP RH-TRU Waste Profile for Final Waste Form Salt Waste

075

WIPP Remote Handled Waste Profiles

Final Waste Form: Solidified Inorganics

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
INEL	2.10	0.00	2.10
ORNL	611.00	174.00	785.00
Total Volume	613.10	174.00	787.10

	Materials	Maximum	Average	Minimum
		Material Parameters (Kg/m3)		
Inorganics	**Iron Based**	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	528.8	1.1	0.0
Organics	**Cellulose**	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	**Inorganic**	1057.7	792.2	173.1
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Figure 3 - 21
WIPP RH-TRU Waste Profile for Final Waste Form Solidified Inorganics

076

WIPP Remote Handled Waste Profiles

Final Waste Form: Uncategorized Metal

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
INEL	4.11	5.60	9.71
LANL	76.46	79.50	155.96
ANL-W	7.17	1.36	8.53
Total Volume	87.74	86.46	174.20

	Materials	Material Parameters (Kg/m3)		
		Maximum	Average	Minimum
Inorganics	**Iron Based**	380.3	226.8	0.0
	Aluminum Based	141.4	2.2	0.0
	Other Metals	913.5	279.0	0.0
	Other Inorganics	34.6	7.7	0.0
Organics	**Cellulose**	68.7	1.8	0.0
	Rubber	18.0	0.1	0.0
	Plastics	82.1	1.6	0.0
Solidified Materials	**Inorganic**	3.7	0.0	0.0
	Organic	3.7	0.0	0.0
Soils		2.9	0.0	0.0

Figure 3 - 22
WIPP RH-TRU Waste Profile for Final Waste Form Uncategorized Metal

077

WIPP Remote Handled Waste Profiles

Final Waste Form: Unknown

Site	Retrievably Stored (m3)	Projected (m3)	Total (m3)
INEL	11.13	0.00	11.13
ANL-W	0.00	23.74	23.74
Total Volume	11.13	23.74	34.87

	Materials	Material Parameters (Kg/m3) Maximum	Average	Minimum
Inorganics	**Iron Based**	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	0.0	0.0	0.0
Organics	**Cellulose**	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Figure 3 - 23
WIPP RH-TRU Waste Profile for Final Waste Form Unknown

078

CHAPTER 4

4. WIPP DISPOSAL RADIONUCLIDE INVENTORY

4.1 INTRODUCTION

The TRU waste generator/storage sites were requested in the Revision 1 data call to submit estimates of the radionuclide inventory on a waste stream basis. Most sites complied with the data request, but many waste streams submitted to the WTWBID did not contain this information. Due to the short timeframe given the TRU waste generator/storage sites for the Revision 1 datacall, sufficient time was not available to derive the data to support each waste stream. The radionuclide data provided on a waste stream basis in Appendix A of the WTWBIR is currently for information purposes only.

4.2 METHODOLOGY

Since the waste–stream specific radionuclide data is insufficient to derive a radionuclide inventory, the site–wide radionuclide inventories reported in the Integrated Data Base (IDB) were used. The most recent IDB (DOE, 1994b) will be used which contains unpublished radionuclide data by site for stored TRU wastes as of December 31, 1993 (Appendix I).

There are still some volume differences at a TRU waste generator/storage site level between the IDB and the WTWBIR (see Section 1.5.4). Closure between the two data sets should be achieved with the Revision 2 WTWBIR data call and publication of Revision 2 of the WTWBIR. Therefore, the volume data from the IDB database (DOE, 1994b) has been used to make the estimates of stored and projected volumes used in deriving the radionuclide information. By using the volume and radionuclide data from the IDB database, there exists one internally consistent set of data for estimating the radionuclide inventory.

IDB radionuclide data is only available for stored TRU waste. Therefore, this historical radionuclide data will also be used to make estimates of the projected radionuclide inventories and for any necessary scaling. Until estimates are available from the TRU waste generator/storage sites on projected radionuclide inventories, the IDB represents the only comprehensive database.

The WIPP radionuclide disposal inventory for CH–TRU waste has been calculated as follows:

- The stored and projected volumes from the IDB (DOE, 1994b) data have been used for the volume estimates and are included in Table 4–1.
- The radionuclide data included as part of the data submitted for the IDB (DOE, 1994b) represents the stored waste only. Appendix E provides the radionuclide inventory by TRU waste site for the stored inventories listed in Table 4–1. These numbers have been decayed to December 1993, using the Radioactive Decay and Accumulation Code (RADAC) System (DOE, 1994d).
- For a particular site and radionuclide, divide the reported inventory for that radionuclide from the IDB (Appendix E) by the volume of stored waste at that site from the IDB (Table 4–1). This results in a curies/m^3 estimate for all reported radionuclides at each site.
- The projected volumes of waste are assumed to have the same radionuclide concentrations on a cubic meter basis as the stored waste at each site.

080

- Since Bettis Atomic Power Laboratory (BT) and Ames Laboratory (AL) reported no existing CH–TRU waste volume inventory, there is no radionuclide inventory for these sites in the IDB. The projected volumes from these two sites, BT (123.5 m^3), and AL (0.09 m^3) have been grouped with the INEL projected CH–TRU waste and assumed to have the same isotopic composition.

- The total volume of projected CH-TRU waste from the IDB in Table 4–1, if added to the stored waste volumes from the IDB, exceeds the capacity of WIPP (176,000 m^3)

- To calculate the radionuclide inventory the total projected CH-TRU waste is adjusted as follows:

  - Maximum design capacity for CH–TRU = 176,000 m^3

  - Stored CH–TRU volume = 104,000 m^3

  - Allowable projected volume = (176,000 - 104,000)x10^5 m^3 = 72,000 m^3

  - Projected waste adjustment factor =

$$\frac{\text{Allowable projected volume}}{\text{Projected volume reported by sites}} = \frac{72{,}000\ m^3}{64{,}600\ m^3} = 1.11$$

- Therefore, the projected radionuclide inventory for each radionuclide at each site is calculated as follows:

$$\text{Stored Radionuclide Inventory} + \left(\text{Concentration of radionuclide in stored waste in curies/m}^3 \ \text{X} \ \text{Volume of projected waste at site} \ \text{X} \ 0.65 \right) = \text{Total CH-TRU inventory for radionuclide at that site}$$

The building of the WIPP radionuclide disposal inventory for RH– TRU waste has been calculated similar to the CH–TRU radionuclide inventory, with the exception of the following:

- Three RH–TRU waste streams that are projected waste streams only were submitted with no accompanying isotopic information: RL-M201, RL–T202, and SR-T001. THESE WASTE STREAMS, WHICH ACCOUNT FOR THE PROJECTED HANFORD AND SRS RH-TRU WASTE VOLUMES, HAVE BEEN OMITTED FROM THE RADIONUCLIDE INVENTORY CALCULATIONS due to the lack of radionuclide information. The RH-TRU projected volumes in the Draft Revision 10 IDB (Appendix I) include both the reported volumes in the two projected Hanford RH-TRU waste streams and the "suspect" volumes reported in the comment field of the two Hanford waste streams (RL-M201 and RL-T202 Appendix A).

- BT did not report stored RH–TRU inventories and the projected inventories have been omitted because no radionuclide information is available.

- The sum of the stored and projected volumes of RH–TRU waste from the TRU waste sites is less than the design capacity of WIPP (7080 m^3) for RH–TRU waste.

081

- To calculate the radionuclide inventory the total projected RH-TRU waste is adjusted as follows:

  - Design capacity for RH–TRU = 7080 m^3

  - Stored RH–TRU volume = 941 m^3

  - Therefore the needed projected waste volume is:

    $$7080\ m^3 - 941\ m^3 = 6139\ m^3$$

  - The projected RH–TRU waste volume (excluding the 2 RL and SR waste streams) is 957 m^3

  - The projected waste volume must be increase by the following factor to "scale" to fill the RH–TRU design capacity:

    $$\frac{6139\ m^3}{957\ m^3} = 6.41$$

- Therefore, the projected radionuclide inventory for each radionuclide at each site is calculated as follows:

$$\text{Stored Radionuclide Inventory} + \left(\text{Concentration of radionuclide in stored waste in curies/m}^3 \times \text{Volume of projected waste at site} \times 6.41\right) = \text{Total RH-TRU inventory for radionuclide at that site}$$

Table 4-2 represents the total radionuclide inventory for CH–TRU and RH–TRU wastes as derived from the Revision 10 IDB database, including any adjustment needed to the projected volumes of waste in order to fill the WIPP to the maximum CH–TRU and RH–TRU design limit.

A comparison of the disposal radionuclide inventories in Revision 0 and in Revision 1 of the WTWBIR shows large changes. Listed below are the dominant reasons for these changes:

- The total radionuclide inventory for CH–TRU waste is much higher than that included in the Revision 0 of the WTWBIR. This is primarily due to two changes:

  - The SR has reported a large volume of CH–TRU projected waste in the IDB (≈62,000 m^3), which was previously reported as "unknown." With the historically high Pu– 238 content, this considerably raises the total curies in the CH–TRU inventory.

  - During the calculations for the Revision 0 inventory, the "projected" part (1994–2022) of the CH–TRU radionuclide inventory was inadvertently left out of the totals reported, causing the inventory numbers to be low (≈25%). This has been corrected in this inventory definition.

082

- The total radionuclide inventory for RH–TRU waste is also much higher than that included in the Revision 0 of the WTWBIR. During calculation of the RH–TRU inventory the volume defined by the sites included more waste than the repository could hold. During those calculations, a misunderstanding occurred about the fact that the IDB radionuclide numbers only covered the "stored" part of the inventory. This caused the Revision 0 WTWBIR reported RH–TRU inventory to be low by a factor of approximately 3 – 4. This has been corrected in this inventory definition.

- Oak Ridge National Laboratory (ORNL) has reported a very conservative inventory for U–235 in RH–TRU waste (≈367 curies before scaling). In order to provide a less conservative estimate of the U–235 inventory, an anticipated transportation requirement of the RH–TRU cask has been imposed.

  The new estimate for U–235 in ORNL RH–TRU waste has been calculated from the anticipated initial transportation limit in the RH–TRU cask of 325 grams (DOE, 1991) of Pu–239 fissile gram equivalent (FGE). Assuming a 1:1 equivalence of U–235 FGE (as required by the TRUPACT–II SARP; Nuclear Packaging, 1991) to Pu–239, this provides a bounding limit of 325 grams of U–235/canister X 7955 canisters x 2.19×10^{-6} curies/gram = 5.66 curies of U–235 in RH–TRU waste inventory. This number has been substituted in Table 4–2 to replace the overly conservative data reported by ORNL.

082

Table 4-1. CH-TRU and RH-TRU IDB Waste Inventories

CH-TRU Site	Stored IDB-ORNL (m^3)	Projected IDB-ORNL (m^3)
AE	29.1	180.0
AL	0.0	0.06
BT	0.0	123.5
ET	1.9	10.4
IN[1]	64774.0	0.0
KA	0.0	0.0
LA	10810.9	14475.0
LB	0.9	2.7
LL	235.0	2442.3
MD	11.9	0.0
MU	0.1	0.0
NT	607.1	0.0
OR	2015.2	654.7
PA	4.3	0.0
PX	0.6	0.0
RF	1040.0	3765.4
RL[2]	15608.9	29198.0
SA	0.9	36.0
SR[4]	8925.9	13700.0
Sum CH-TRU	**104066.7**	**64588.06**
RH-TRU Site	**Stored IDB-ORNL (m^3)**	**Projected IDB-ORNL (m^3)**
AE	1.7	45.9
BT	0.0	1.54
IN	79.8	162.0
KA	2.4	25.0
LA	91.3	280.0
OR	563.9	442.3
RL	201.0	41232.0*
SA	0.9	7.0*
SR[4]	0.0	35.9*
Sum RH-TRU	**941.0[3]**	**956.74**

* Excluded from the IDB-based RH-TRU radionuclide inventory rollups because no radionuclide information was submitted.

1. 40% of this stored inventory assumed to be low-level waste.
2. 50% of this stored inventory assumed to be low-level waste.
3. Does not include 5.3 m^3 of RH-TRU at NTS which is anticipated to be CH-TRU after repackaging.
4. The IDB volumes for SRS projected CH-TRU and RH-TRU waste have been corrected since issuance of the Draft Revision 10 IDB (Appendix I).

084

Table 4-2. Disposal Radionuclide Inventory

Nuclide	Total CH	Total RH
AC-225	2.03E+00	3.28E-01
AC-227	6.55E-01	1.52E-02
AC-228	5.27E-01	4.08E-03
AG-109M	4.85E+01	NR
AG-110	5.61E-06	1.07E-05
AG-110M	4.21E-04	8.06E-04
AM-241	2.23E+05	5.30E+02
AM-242	4.93E-02	NR
AM-242M	4.96E-02	NR
AM-243	2.94E+01	1.22E-02
AM-245	9.07E-09	2.52E-14
AT-217	2.03E+00	3.28E-01
BA-137M	5.03E+03	3.10E+05
BI-210	1.01E+00	4.09E-11
BI-211	6.57E-01	1.46E-02
BI-212	2.77E+01	9.03E+00
BI-213	2.03E+00	3.28E-01
BI-214	5.84E+00	7.23E-10
BK-249	6.25E-04	1.74E-09
BK-250	2.35E-06	NR
C-14	1.83E+01	1.51E+02
CD-109	4.85E+01	NR
CD-113M	4.65E-05	2.36E-05
CE-144	8.22E+01	5.58E+02
CF-249	1.56E+00	8.11E-02
CF-250	3.54E-01	NR

NR = Not reported by sites.

085

Table 4-2. Disposal Radionuclide Inventory (continued)

Nuclide	Total CH	Total RH
CF-251	3.93E-03	NR
CF-252	1.85E+02	5.11E+01
CM-242	1.48E-02	NR
CM-243	1.33E+00	2.01E+03
CM-244	5.40E+03	1.07E+04
CM-245	5.16E+01	1.32E-05
CM-246	1.10E-01	NR
CM-247	2.98E-09	NR
CM-248	5.06E-02	2.34E-03
CO-58	5.50E-05	7.92E-07
CO-60	1.53E+02	1.08E+04
CR-51	NR	2.54E-31
CS-134	5.88E+00	2.15E+03
CS-135	7.90E-03	4.58E-03
CS-137	5.32E+03	3.28E+05
ES-254	2.35E-06	NR
EU-150	3.65E-05	NR
EU-152	7.41E+00	5.28E+04
EU-154	3.05E+01	2.76E+04
EU-155	4.14E+01	6.78E+03
FE-55	3.296E-05	1.44E+01
FE-59	1.96E-02	4.04E-19
FR-221	2.03E+00	3.28E-01
FR-223	9.04E-03	2.10E-04
H-3	9.64E-01	8.23E+01
I-129	1.28E-09	NR

NR = Not reported by sites.

086

Table 4-2. Disposal Radionuclide Inventory (continued)

Nuclide	Total CH	Total RH
KR-85	2.24E-01	9.58E+01
MN-54	1.12E-02	2.76E+00
NB-95	4.96E-01	9.90E+00
NB-95M	1.66E-03	3.41E-02
NI-59	3.38E-03	NR
NI-63	4.19E-01	5.03E+01
NP-237	8.82E+01	1.18E-02
NP-238	2.48E-04	NR
NP-239	2.94E+01	1.22E-02
NP-240	1.10E-09	1.78E-13
NP-240M	1.00E-06	1.62E-10
PA-231	4.08E-03	1.78E-01
PA-233	3.32E+01	1.18E-02
PA-234	2.44E-02	1.70E-02
PA-234M	1.88E+01	1.31E+01
PB-209	2.03E+00	3.28E-01
PB-210	1.01E+00	4.09E-11
PB-211	6.57E-01	1.46E-02
PB-212	2.77E+01	9.03E+00
PB-214	5.84E+00	7.23E-10
PD-107	1.17E-03	6.77E-04
PM-147	1.26E+03	4.10E+03
PO-210	8.92E-01	3.05E-11
PO-211	1.79E-03	3.98E-05
PO-212	1.78E+01	5.78E+00
PO-213	1.99E+00	3.21E-01

NR = Not reported by sites.

087

Table 4-2. Disposal Radionuclide Inventory (continued)

Nuclide	Total CH	Total RH
PO-214	5.84E+00	7.23E-10
PO-215	6.57E-01	1.46E-02
PO-216	2.77E+01	9.03E+00
PO-218	5.84E+00	7.23E-10
PR-144	8.22E+01	5.58E+02
PU-236	1.69E-02	NR
PU-238	1.89E+06	3.53E+03
PU-239	3.85E+05	6.41E+03
PU-240	7.22E+04	1.74E+02
PU-241	1.01E+06	9.06E+02
PU-242	1.27E+03	1.48E-02
PU-243	2.98E-09	NR
PU-244	1.00E-06	1.62E-10
RA-223	6.57E-01	1.46E-02
RA-224	2.77E+01	9.03E+00
RA-225	2.04E+00	3.31E-01
RA-226	5.84E+00	7.23E-10
RA-228	5.27E-01	4.08E-03
RH-106	4.02E+01	8.42E+02
RN-219	6.57E-01	1.46E-02
RN-220	2.77E+01	9.03E+00
RN-222	5.84E+00	7.23E-10
RU-106	4.02E+01	8.42E+02
SB-125	1.58E+01	2.46E+03
SB-126	2.13E-03	1.23E-03
SB-126M	1.52E-02	8.80E-03

NR = Not reported by sites.

088

Table 4-2. Disposal Radionuclide Inventory (continued)

Nuclide	Total CH	Total RH
SE-79	6.86E-03	3.97E-03
SM-151	2.50E+01	1.42E+01
SN-119M	6.80E-03	1.37E-02
SN-121M	4.82E-01	2.69E-01
SN-126	1.52E-02	8.80E-03
SR-90	4.07E+03	6.68E+05
TA-182	NR	1.72E-04
TC-99	2.46E+01	2.28E-01
TE-125M	6.55E-04	1.01E+03
TE-127	3.07E-02	1.13E-01
TE-127M	3.15E-02	1.15E-01
TH-227	6.56E-01	1.48E-02
TH-228	2.77E+01	9.04E+00
TH-229	2.05E+00	3.36E-01
TH-230	4.90E-02	8.79E-07
TH-231	2.88E+00	2.21E+03
TH-232	6.07E-01	7.09E-03
TH-234	1.88E+01	1.31E+01
TL-207	6.56E-01	1.45E-02
TL-208	9.96E+00	3.24E+00
TL-209	4.39E-02	7.08E-03
TL-210	1.23E-03	1.52E-13
U-232	2.63E+01	1.16E+01
U-233	1.38E+03	8.57E+02
U-234	2.50E+02	4.18E-02
U-235	2.88E+00	5.66E+00

NR = Not reported by sites.

089

Table 4-2. Disposal Radionuclide Inventory (continued)

Nuclide	Total CH	Total RH
U-236	1.34E-01	4.11E-05
U-237	2.47E+01	2.22E-02
U-238	1.88E+01	1.31E+01
U-240	1.00E-06	1.62E-10
Y-90	4.07E+03	6.68E+05
ZN-65	1.21E-08	NR
ZR-93	8.87E-02	5.14E-02
ZR-95	2.24E-01	4.60E+00
Total	3.60E+06	2.11E+06

NR = Not reported by sites.

090

CHAPTER 5

5. WASTE MATERIAL PARAMETERS

5.1 INTRODUCTION

Some waste materials that occur in TRU waste may degrade over the 10,000-year regulatory period and estimates of masses/volume are needed for performance modeling (Table 1-1). Some of these waste materials may produce gas by either chemical, microbial, or radiolytic processes (WIPP PA, 1993). These types of processes need to be evaluated as part of the WIPP SPM and PA modeling effort to analyze their impact on repository behavior.

5.2 PARAMETER DESCRIPTION

This chapter identifies and defines the waste material parameters to be evaluated in performance assessment calculations. The same methodology used for defining waste stream profiles and combining them into site-specific and WIPP waste profiles is used to develop a disposal inventory for WIPP by waste material parameters (see Figure 3-2). Waste material parameter information is provided for each waste stream profile by the TRU waste generator/storage sites (Figure 1-2). In those cases where waste material parameter information could not be provided by the TRU waste generator/storage sites, an alternative methodology was adopted as described in Section 3.1.3. This waste material parameter information is used to estimate the anticipated WIPP inventory, which is then scaled to obtain the repository design limit (disposal inventory), if needed. This inventory is presented as a weighted average with a maximum and minimum expected weight/volume for each waste material parameter.

The waste material parameter information, which is provided by the TRU waste generator/storage sites, consists of 10 waste material parameters and additional packaging materials that are direct inputs into the SPM and PA models. These are presented below.

Inorganics

- Iron-based metals/alloys – This designation is meant to include iron and steel alloys in the waste and does not include the waste container materials.
- Aluminum-based metals/alloys – Aluminum or aluminum-based alloys in the waste materials.
- Other Metals – All other metals found in the waste materials (e.g., copper, lead, zirconium, tantalium, etc.). The lead portion of lead rubber gloves/aprons is also included in this category.
- Other Inorganic Materials – Include inorganic non-metal waste materials such as concrete, glass, firebrick, ceramics, sand, and inorganic sorbents.

Organics

- Cellulosics – Includes those materials generally derived from high polymer plant carbohydrates. Examples are paper, cardboard, kimwipes, wood, cellophane, cloth, etc.
- Rubber – Includes natural or manmade elastic latex materials. Examples are Hypalon®, neoprene, surgeons' gloves, leaded-rubber gloves (rubber part only), etc.

092

- Plastics – Includes generally manmade materials, often derived from petroleum feedstock. Examples are polyethylene, polyvinylchloride, Lucite, Teflon, etc.

Solidified Materials

- Inorganic Matrix – This includes any homogenous materials consisting of sludge or aqueous-based liquids that are solidified with cement, Envirostone®, or other solidification agents. Examples are wastewater treatment sludge, cemented aqueous liquids, and inorganic particulates, etc.
- Organic Matrix – This includes cemented organic resins, solidified organic liquids, and sludges.

Soils

- Generally consists of naturally occurring soils that have been contaminated with inorganic waste materials.

Packaging Materials

The TRU waste generator/storage sites have been asked to define waste streams in each waste stream profile expressed as final waste form and volumes in containers that are currently approved for shipment. Listed below are the currently approved CH–TRU packaging configurations for TRUPACT–II (DOE, 1991) and anticipated approved RH–TRU packaging configurations (DOE, 1991):

- TRUPACT–II
  - 55–gallon drum
  - Standard Waste Box (SWB)
  - 55–gallon drums overpacked in SWB.
- RH–TRU cask (anticipated acceptable packaging configurations for the RH–TRU cask)
  - RH–TRU canister
  - three 55–gallon or 30–gallon drums overpacked in a RH–TRU canister.

In cases where the sites defined a type of waste container, but not the weight/volume of the packaging, assumptions were made about the weight of the containers in order to include these estimates as part of the overall inventory destined or WIPP. If overpacking a waste container was necessary for transport in a shipping cask, overpacking was assumed. The densities assumed are included as part of the "TRU system–wide data assumptions" included in Section 1.5.

- Steel – The weight of the steel part of the packaging from container information provided by the TRU waste generator/storage sites. Any necessary overpacking is included in the weight.
- Plastics – The weight of any plastic packaging submitted by the TRU sites. When weight of a rigid liner is not given a 90-mil HDPE liner is assumed.

093

- Lead – The weight of the Pb shielding in a RH canister is assumed if not provided by the TRU waste sites. The weight is included in the "Packaging Material Assumptions" in Chapter 1.5.3.

5.3 METHODOLOGY

The rollups of waste material parameters by WMCGs or by site use the volumes from the WTWBID. The roll ups by WMCGs or by site require combining data from several WTWBID waste streams. The averages for the material parameters are calculated from the average densities provided by the TRU waste generator/storage sites modified by the WTWBID volume fractions and summed as follows:

$$\begin{array}{l}\text{Average Density} \\ \text{of waste material} \\ \text{parameter}\end{array} = \text{Average Density}_i \;\; \text{X} \;\; \frac{(\text{Volume WTWBIR Stream}_i)}{(\text{Total Volume of WMCG})} + \cdots$$

where i is an index representing individual waste streams of the same WMCG

The minimum density is chosen as the smallest minimum density of a particular waste material parameter in the WTWBID waste streams in a particular site-specific rollup. The maximum density is chosen in a similar manner, except that the largest maximum density was chosen.

In many cases, the TRU waste generator/storage sites did not have data for minimum and maximum percentages, even though average percentages are provided. In these cases, for rollup purposes only, the minimum is assumed to be zero and the maximum is assumed to be equal to the average. This ensures that the calculated and rolled up maximum densities are greater than the average densities. However, the maximum density may not be a true maximum but the maximum average density (see Chapter 7 for further WTWBID information).

5.4 WIPP WASTE MATERIAL PARAMETER ROLLUPS

The waste material parameters that are inputs into the SPM process and PA models are presented in Table 5-1 for CH-TRU waste and Table 5-2 for RH-TRU waste. These tables represent the WIPP disposal inventory of waste material parameters. These waste material parameters are the final rollups of the WIPP waste profiles in Figures 3-4 to 3-23.

5.5 UTILIZATION OF WASTE MATERIAL PARAMETER DATA IN APPLICATIONS

The waste material parameter data presented in Tables 5–1 and 5–2 must be used with certain limitations. If the "average" weight/volume (density) composition of CH–TRU and RH–TRU wastes in terms of the waste material parameters is needed then the middle column of Tables 5–1 and 5–2 labelled "Average" should be used in the calculations. If the task requires a distribution of values then the "Maximum" and "Minimum" columns should be used in conjunction with the "Average" column with the following limitations:

094

Table 5-1

WIPP CH-TRU Waste Material Parameter Disposal Inventory

	Materials	Maximum (Kg/m3)	Average (Kg/m3)	Minimum (Kg/m3)
Inorganics	Iron Based	2.1E+03	8.3E+01	0.0E+00
	Aluminum Based	1.0E+03	1.2E+01	0.0E+00
	Other Metals	1.4E+03	2.7E+01	0.0E+00
	Other Inorganics	2.1E+03	3.9E+01	0.0E+00
Organics	Cellulose	9.6E+02	1.7E+02	0.0E+00
	Rubber	6.8E+02	2.1E+01	0.0E+00
	Plastics	8.9E+02	6.3E+01	0.0E+00
Solidified Materials	Inorganic	2.2E+03	1.3E+02	0.0E+00
	Organic	1.4E+03	8.4E+00	0.0E+00
Soils		1.6E+03	5.7E+00	0.0E+00

Container Materials

Steel	137
Plastic/ Liners	33

095

Table 5-2

WIPP RH-TRU Waste Material Parameter Disposal Inventory

	Materials	Maximum (Kg/m3)	Average (Kg/m3)	Minimum (Kg/m3)
Inorganics	Iron Based	1.7E+03	9.4E+01	0.0E+00
	Aluminum Based	2.6E+02	1.8E+01	0.0E+00
	Other Metals	9.1E+02	1.0E+01	0.0E+00
	Other Inorganics	2.0E+03	3.1E+01	0.0E+00
Organics	Cellulose	9.6E+02	2.7E+01	0.0E+00
	Rubber	1.9E+02	4.8E+00	0.0E+00
	Plastics	5.5E+02	2.4E+01	0.0E+00
Solidified Materials	Inorganic	1.1E+03	1.3E+02	0.0E+00
	Organic	3.7E+00	1.7E-03	0.0E+00
Soils		1.9E+02	1.8E+00	0.0E+00

Container Materials

Steel	447
Plastic/Liners	3.2
Lead	465
Steel Plug	2145

096

- The sum of all the waste material parameters in the "average" column represents the "average" weight of a cubic meter of CH–TRU or RH–TRU expected at WIPP. For instance, the "average" cubic meter of CH–TRU waste expected at WIPP is (see Table 5–1):

  559.5 kg/m^3 CH–TRU waste + 173 kg/m^3 of packaging = 732.5 kg/m^3

- The weight of packaging is not expected to vary, so if any "sampling" of distributions of densities is required, the sampling should only be on the waste part of the above equation.
- If sampling of the waste material parameters is needed, the sum of the densities of all waste material parameters sampled for any iteration SHOULD NOT EXCEED THE AVERAGE DENSITY OF THE WASTE AS DEFINED IN THE "AVERAGE" COLUMN SUMMATION. That is, one cannot sample on the upper range for all waste material parameters or sample all waste material parameters at the lower end of the range. By default, if some waste material parameters are sampled at higher values than the average some will have to be sampled at lower values than average so that the density of the waste always remains the same (sum of the "average" column).

The same sampling methodology, if needed, should be used for the RH–TRU waste as reported in Table 5–2.

TO OBTAIN THE TOTAL WASTE MATERIAL PARAMETER WEIGHTS FOR THE DISPOSAL INVENTORY, USERS OF THE DATA SHOULD MULTIPLE THE AVERAGE DENSITIES OF THE WASTE MATERIAL PARAMETERS FOR CH–TRU (TABLE 5–1) AND RH–TRU (TABLE 5–2) BY THE DESIGN BASIS VOLUME.

For example:

The expected (average) CH–TRU inventory of combustibles for WIPP is (Table 5-1):

170 kg/m^3 x 176,000 m^3 (design basis) = 29,900,000 kg combustibles

For steel in CH–TRU waste:

83 kg/m^3(waste) + 140 kg/m^3(container) = 223 kg/m^3

223 kg/m^3 x 176,000 m^3 = 3,900,000 kg steel

097

6. STORED AND PROJECTED CH-TRU AND RH-TRU INVENTORIES BY SITE

As described in Chapter 3, each waste stream from each waste generating/storage site is characterized in a waste stream profile (Appendix A). These waste stream profiles are rolled up by WMCGs for each generator/storage site. Summary tables of contact-handled and remote-handled waste volumes are provided in Tables 6-1 and 6-2. Summary profiles of waste volumes by WMCG for each site are provided in Tables 6-3 through 6-22.

098

TRANSURANIC WASTE DISPOSAL INVENTORY BY SITE

Contact Handled Waste (Cubic Meters)

Storage/Generator Site	Stored Volumes*	Projected Volumes	Anticipated Volumes
AMES LAB	0.0E+00	1.0E-01	1.0E-01
ANL-E	2.9E+01	1.7E+00	3.1E+01
ANL-W	2.0E-02	5.8E+00	5.9E+00
BT	0.0E+00	1.2E+02	1.2E+02
ETEC	1.9E+00	5.2E+00	7.1E+00
HANFORD	9.3E+03	2.1E+04	3.1E+04
INEL	3.5E+04	1.0E+00	3.5E+04
KAPL	2.4E+00	0.0E+00	2.4E+00
LANL	1.1E+04	7.7E+03	1.9E+04
LBL	8.4E-01	4.4E+00	5.3E+00
LLNL	2.1E+02	6.9E+02	9.0E+02
MOUND	2.6E+02	0.0E+00	2.6E+02
MU	6.0E-02	1.6E+00	1.7E+00
NTS	6.2E+02	0.0E+00	6.2E+02
ORNL	7.8E+02	2.6E+02	1.0E+03
PA	3.5E+00	0.0E+00	3.5E+00
PANTEX	6.2E-01	0.0E+00	6.2E-01
RFP	1.1E+03	5.9E+03	7.0E+03
SNL/NM	8.0E+00	7.0E+00	1.5E+01
SRS	1.5E+04	1.5E+04	2.9E+04
Total CH Volumes	**7.3E+04**	**5.1E+04**	**1.2E+05**

* A small amount of Hanford stored CH waste (2.0E+02 cubic meters) is expected to be retrieved and packaged as RH waste

Table 6-1: Contact Handled Transuranic Waste Disposal Inventory by Site

099

TRANSURANIC WASTE DISPOSAL INVENTORY BY SITE

Remote Handled Waste

(Cubic Meters)

Storage/Generator Site	**Stored Volumes**	**Projected Volumes**	**Anticipated Volumes**
ANL-W	8.7E+00	2.8E+01	3.6E+01
BCLDP	0.0E+00	7.1E+01	7.1E+01
BT	0.0E+00	1.6E+00	1.6E+00
HANFORD	3.3E+01	3.0E+03	3.0E+03
INEL	3.1E+01	1.7E+01	4.8E+01
KAPL	1.1E+01	2.5E+01	3.6E+01
LANL	9.1E+01	8.3E+01	1.7E+02
ORNL	9.9E+02	3.6E+02	1.4E+03
SRS	0.0E+00	6.4E+01	6.4E+01
Total RH Volumes	**1.2E+03**	**3.6E+03**	**4.8E+03**

Table 6-2: Remote Handled Transuranic Waste Disposal Inventory by Site

SITE TRANSURANIC WASTE VOLUMES

Site Name: **AMES LAB**

(Cubic Meters)

Final Waste Form	Retrievably Stored	Projected	Total
Contact Handled Waste			
Solidified Inorganics	0	0.1	0.1
Total CH Volumes	**0.00**	**0.10**	**0.10**

Table 6 - 3; AMES LAB Final Waste Form Volumes

/01

SITE TRANSURANIC WASTE VOLUMES

Site Name: ANL-E

(Cubic Meters)

Final Waste Form	Retrievably Stored	Projected	Total
Contact Handled Waste			
Lead/Cadmium Metal Waste	1.1	0	1.1
Solidified Inorganics	23.045	1.12	24.165
Solidified Organics	0.025	0	0.025
Uncategorized Metal	4.96	0.56	5.52
Total CH Volumes	**29.13**	**1.68**	**30.81**

Table 6 - 4; ANL-E Final Waste Form Volumes

SITE TRANSURANIC WASTE VOLUMES

Site Name: ANL-W

(Cubic Meters)

Final Waste Form	Retrievably Stored	Projected	Total
Contact Handled Waste			
Heterogeneous	0	3.36	3.36
Lead/Cadmium Metal Waste	0.02	2.48	2.5
Total CH Volumes	**0.02**	**5.84**	**5.86**
Remote Handled Waste			
Filter	0.89	2.09	2.98
Heterogeneous	0.59	0.08	0.67
Lead/Cadmium Metal Waste	0	0.36	0.36
Uncategorized Metal	7.172	1.36	8.532
Unknown	0	23.736	23.736
Total RH Volumes	**8.65**	**27.63**	**36.28**

Table 6 - 5; ANL-W Final Waste Form Volumes

/03

CHAPTER 6

SITE TRANSURANIC WASTE VOLUMES

Site Name: **BCLDP**

(Cubic Meters)

Final Waste Form	Retrievably Stored	Projected	Total
Contact Handled Waste			
Total CH Volumes			
Remote Handled Waste			
Heterogeneous	0	71	71
Total RH Volumes	0.00	71.00	71.00

Table 6 - 6; BCLDP Final Waste Form Volumes

105

SITE TRANSURANIC WASTE VOLUMES

Site Name: **BT**

(Cubic Meters)

Final Waste Form	Retrievably Stored	Projected	Total
Contact Handled Waste			
Heterogeneous	0	123.816	123.816
Total CH Volumes	0.00	**123.82**	**123.82**
Remote Handled Waste			
Heterogeneous	0	1.557	1.557
Total RH Volumes	**0.00**	**1.56**	**1.56**

Table 6 - 7; BT Final Waste Form Volumes

/106

SITE TRANSURANIC WASTE VOLUMES

Site Name: ETEC

(Cubic Meters)

Final Waste Form	Retrievably Stored	Projected	Total
Contact Handled Waste			
Heterogeneous	1.66	5.2	6.86
Lead/Cadmium Metal Waste	0.21	0	0.21
Total CH Volumes	**1.87**	**5.20**	**7.07**

Table 6 - 8; ETEC Final Waste Form Volumes

107

SITE TRANSURANIC WASTE VOLUMES

Site Name: HANFORD

(Cubic Meters)

Final Waste Form	Retrievably Stored	Projected	Total
Contact Handled Waste			
Combustible	526.48	12269.027	12795.507
Heterogeneous	8568.55	827.157	9395.707
Lead/Cadmium Metal Waste	3.13	0.29	3.42
Soils	111.69	309.27	420.96
Solidified Inorganics	1.46	2924.759	2926.219
Solidified Organics	2.17	15.248	17.418
Uncategorized Metal	103.35	4890.948	4994.298
Total CH Volumes	**9316.83**	**21236.70**	**30553.53**
Remote Handled Waste			
Heterogeneous	33.163	2973.71	3006.873
Total RH Volumes	**33.16**	**2973.71**	**3006.87**

Table 6 - 9; HANFORD Final Waste Form Volumes

108

SITE TRANSURANIC WASTE VOLUMES

Site Name: INEL

(Cubic Meters)

Final Waste Form	Retrievably Stored	Projected	Total
Contact Handled Waste			
Combustible	670.9	0	670.9
Filter	323.56	0	323.56
Graphite	650.7	0	650.7
Heterogeneous	9649.5	1	9650.5
Inorganic Non-metal	1052.89	0	1052.89
Salt Waste	22.91	0	22.91
Soils	3.8	0	3.8
Solidified Inorganics	12164.28	0	12164.28
Solidified Organics	912.6	0	912.6
Uncategorized Metal	7564.09	0	7564.09
Unknown	1655.91	0	1655.91
Total CH Volumes	**34671.14**	**1.00**	**34672.14**
Remote Handled Waste			
Heterogeneous	13.634	2.8	16.434
Lead/Cadmium Metal Waste	0	5.6	5.6
Salt Waste	0	2.8	2.8
Solidified Inorganics	2.1	0	2.1
Uncategorized Metal	4.11	5.6	9.71
Unknown	11.13	0	11.13
Total RH Volumes	**30.97**	**16.80**	**47.77**

Table 6 - 10; INEL Final Waste Form Volumes

SITE TRANSURANIC WASTE VOLUMES

Site Name: KAPL

(Cubic Meters)

Final Waste Form	Retrievably Stored	Projected	Total
Contact Handled Waste			
Heterogeneous	2.4	0	2.4
Total CH Volumes	**2.40**	**0.00**	**2.40**
Remote Handled Waste			
Heterogeneous	11.23	25.23	36.46
Total RH Volumes	**11.23**	**25.23**	**36.46**

Table 6 - 11; KAPL Final Waste Form Volumes

//10

SITE TRANSURANIC WASTE VOLUMES

Site Name: LANL

(Cubic Meters)

Final Waste Form	Retrievably Stored	Projected	Total
Contact Handled Waste			
Combustible	1768.33	2464.6	4232.93
Soils	109.37	144.6	253.97
Solidified Inorganics	4848.38	2059.03	6907.41
Uncategorized Metal	4134.8	3006.17	7140.97
Total CH Volumes	**10860.88**	**7674.40**	**18535.28**
Remote Handled Waste			
Combustible	14.84	3.16	18
Uncategorized Metal	76.46	79.5	155.96
Total RH Volumes	**91.30**	**82.66**	**173.96**

Table 6 - 12; LANL Final Waste Form Volumes

SITE TRANSURANIC WASTE VOLUMES

Site Name: LBL

(Cubic Meters)

Final Waste Form	Retrievably Stored	Projected	Total
Contact Handled Waste			
Heterogeneous	0.84	4.42	5.26
Total CH Volumes	**0.84**	**4.42**	**5.26**

Table 6 - 13; LBL Final Waste Form Volumes

112

SITE TRANSURANIC WASTE VOLUMES

Site Name: LLNL

(Cubic Meters)

Final Waste Form	Retrievably Stored	Projected	Total
Contact Handled Waste			
Combustible	48.882	372.32	421.202
Salt Waste	0.624	2.912	3.536
Solidified Inorganics	13.303	66.148	79.451
Uncategorized Metal	144.326	247	391.326
Total CH Volumes	207.14	688.38	895.52

Table 6 - 14; LLNL Final Waste Form Volumes

113

SITE TRANSURANIC WASTE VOLUMES

Site Name: MOUND

(Cubic Meters)

Final Waste Form	Retrievably Stored	Projected	Total
Contact Handled Waste			
Combustible	5.61	0	5.61
Heterogeneous	0.416	0	0.416
Soils	146.88	0	146.88
Solidified Inorganics	7.28	0	7.28
Uncategorized Metal	102.276	0	102.276
Total CH Volumes	**262.46**	**0.00**	**262.46**

Table 6 - 15; MOUND Final Waste Form Volumes

114

SITE TRANSURANIC WASTE VOLUMES

Site Name: MU

(Cubic Meters)

Final Waste Form	Retrievably Stored	Projected	Total
Contact Handled Waste			
Heterogeneous	0.06	1.604	1.664
Total CH Volumes	**0.06**	**1.60**	**1.66**

Table 6 - 16; MU Final Waste Form Volumes

SITE TRANSURANIC WASTE VOLUMES

Site Name: NTS

(Cubic Meters)

Final Waste Form	**Retrievably Stored**	**Projected**	**Total**
Contact Handled Waste			
Heterogeneous	619.5	0	619.5
Total CH Volumes	**619.50**	**0.00**	**619.50**

Table 6 - 17; NTS Final Waste Form Volumes

116

SITE TRANSURANIC WASTE VOLUMES

Site Name: ORNL

(Cubic Meters)

Final Waste Form	Retrievably Stored	Projected	Total
Contact Handled Waste			
Heterogeneous	672.98	263.9	936.88
Solidified Inorganics	110	0	110
Total CH Volumes	**782.98**	**263.90**	**1046.88**
Remote Handled Waste			
Heterogeneous	382.81	182.7	565.51
Solidified Inorganics	611	174	785
Total RH Volumes	**993.81**	**356.70**	**1350.51**

Table 6 - 18; ORNL Final Waste Form Volumes

117

SITE TRANSURANIC WASTE VOLUMES

Site Name: PA

(Cubic Meters)

Final Waste Form	Retrievably Stored	Projected	Total
Contact Handled Waste			
Solidified Inorganics	3.45	0	3.45
Total CH Volumes	**3.45**	**0.00**	**3.45**

Table 6 - 19; PA Final Waste Form Volumes

SITE TRANSURANIC WASTE VOLUMES

Site Name: PANTEX

(Cubic Meters)

Final Waste Form	Retrievably Stored	Projected	Total
Contact Handled Waste			
Heterogeneous	0.624	0	0.624
Total CH Volumes	**0.62**	**0.00**	**0.62**

Table 6 - 20; PANTEX Final Waste Form Volumes

SITE TRANSURANIC WASTE VOLUMES

Site Name: **RFP**

(Cubic Meters)

Final Waste Form	Retrievably Stored	Projected	Total
Contact Handled Waste			
Filter	103.96	1087.59	1191.55
Graphite	18.06	43.4	61.46
Heterogeneous	312.86	804.58	1117.44
Inorganic Non-metal	110.68	318.68	429.36
Lead/Cadmium Metal Waste	51.87	124.18	176.05
Salt Waste	9.45	56.6	66.05
Solidified Inorganics	228.63	2988.11	3216.74
Solidified Organics	132.8	48.82	181.62
Uncategorized Metal	164.82	429.5	594.32
Total CH Volumes	**1133.13**	**5901.46**	**7034.59**

Table 6 - 21; RFP Final Waste Form Volumes

/20

SITE TRANSURANIC WASTE VOLUMES

Site Name: SNL/NM

(Cubic Meters)

Final Waste Form	Retrievably Stored	Projected	Total
Contact Handled Waste			
Heterogeneous	8.04	7	15.04
Total CH Volumes	**8.04**	**7.00**	**15.04**

Table 6 - 22; SNL/NM Final Waste Form Volumes

121

SITE TRANSURANIC WASTE VOLUMES

Site Name: SRS

(Cubic Meters)

Final Waste Form	Retrievably Stored	Projected	Total
Contact Handled Waste			
Combustible	4066.8	11962.5	16029.3
Heterogeneous	10132.2	2563.6	12695.8
Solidified Inorganics	0.04	0	0.04
Solidified Organics	404.85	240.7	645.55
Total CH Volumes	**14603.89**	**14766.80**	**29370.69**
Remote Handled Waste			
Heterogeneous	0	63.92	63.92
Total RH Volumes	**0.00**	**63.92**	**63.92**

Table 6 - 23; SRS Final Waste Form Volumes

122

CHAPTER 7

7. WIPP TRANSURANIC WASTE BASELINE INVENTORY DATABASE

A WIPP Transuranic Waste Baseline Inventory Database (WTWBID) has been developed to support the Waste Isolation Pilot Plant Transuranic Waste Baseline Inventory Report (WTWBIR). This database was used to roll up the waste data and print out the various tables and reports used in the WTWBIR. The database is operated in the Microsoft Access Vs. 2.0 system.

7.1 DATABASE DESCRIPTION

The database actually consists of two databases with essentially the same primary data tables. The first database is WTWBIR.MDB. This database contains the original data submitted by the sites or agreed with the sites through discussions with WTWBIR personnel. This database is used to produce the forms in Appendix A. The second database is called REPORTS.MDB and is used to produce the tables and figures in the rest of the report. There are two databases because the basic data in WTWBIR.MDB must be manipulated to produce rational roll ups of the data for the reports and figures. These manipulations are described in this section of the report.

Each record in the database represents one waste stream as defined by a unique waste stream ID (WIPP_ID). In the case where the WTWBIR waste stream is the same as a waste stream reported in phase 2 of the MWIR, the WIPP_ID is the same as the MWIR ID (UNIQUE_WS). Some streams, primarily non mixed and a few mixed waste streams, were not reported in the MWIR. In these cases, if the site did not assign a proper ID, a WIPP_ID was assigned by the WTWBIR team.

The reports and tables produced for the WTWBIR are produced from different data sorts based on the WTWBIR-ID, Site_Name, Handling and Final_Waste_Form fields. The Site_Name refers to the sites as defined in the field WS_SITE. The Site_Name specifies the site which reported and is typically storing the waste. The generator site may differ from the storage site. The Handling field defines whether the waste is categorized as CH or RH waste. The Final_Waste_Form defines a general grouping based on the physical and chemical properties in the waste stream. These are broader waste matrix code groupings (WMCG) (Table 1-2) based generally on the MWIR treatability groups which are described in the MWIR form instructions. In Revision 0 of the WTWBIR, these Final_Waste_Forms were referred to as Matrix_Names.

The volumes are rolled up from the cumulative stored volumes and projected volumes provided by the sites. The stored volumes are based on the cumulative end of 1993 volumes in the database. Some sites provided stored volumes for 1992 and projected volumes for 1993 while other sites provided stored volumes for 1993. In order to be consistent, the stored volumes for sites that based their stored volumes on 1992 were calculated by adding the 1992 volume to the 1993 projected volume. Projected volumes were calculated by adding the volumes for 1994 through 2022.

In Table 3-5, a column was calculated to match the maximum design capacity of WIPP for CH waste. This was done by increasing all the Final_Waste_Form projected volumes proportionately, except Unknown, so that the total CH volume would equal the maximum WIPP capacity. Additional waste volume was calculated for each waste stream proportionate to the projected volumes for each stream such that the sum of the scaled volumes for contact handled waste equaled 175,600 cubic meters. Enough waste is already identified to fill the WIPP to capacity for remote handled waste.

124

The other fields used to develop roll ups for the tables in the reports are the waste material parameters. The sites were asked to estimate an average, minimum and maximum concentration of materials in each waste stream. For example, weights of metals such as brass, copper, tantalum and materials simply described as metals were rolled up under the field OM_xxx (where xxx is min, max, or avg) which stands for "Other Metals" (see the data dictionary; Table 7-1). Note that because some materials are described only as metals, aluminum and iron can be in the OM_xxx field as well as in the IB_xxx or AB_xxx fields.

Two categories of sludges and solidified materials are represented by fields. These are solidified inorganic solids (SIM_xxx) and solidified organic solids (SOM_xxx). The particular category into which a sludge or solidified material is placed is determined by the overall matrix of the resulting material after any solidification or stabilization steps. For example, a small amount of organic liquids/sludges solidified in cement would be placed in the solidified inorganics category and a drum of organic based resin beads solidified would be placed in the solidified organics category.

The rest of the fields are reasonably self explanatory, but additional discussion on Cel_xxx, Rub_xxx, and Plas_xxx, may be helpful. Cel_xxx includes all cellulose base materials and will typically include paper, cloth, wood, kimwipes and other materials derived from plant based materials. It is assumed that cloth is plant derived material such as cotton and not plastic based such as rayon or nylon. Rub_xxx consists of rubber based materials. Included in this category are Hypalon®, neoprene, and surgeons gloves. Plas_xxx represents plastics such as Lucite®, polyethylene, Tyvek®, teflon and polyvinyl chloride. Plastic bags are used extensively in packaging the waste and would be included in this category. The plastic drum or container liners were not included in this category and were requested separately.

The parameter information is manipulated so that the waste material parameters can be added up and averaged at WIPP, site and Final Waste Form levels. Waste streams for which no waste parameters are provided or for which average, minimum and maximum parameters are not all provided cannot be rationally averaged and summed. Therefore, in order to calculate averaged parameters from the waste stream data provided, certain manipulations on the data are necessary. These manipulations are summarized below. If the parameters for a particular waste material were incomplete, the following assumptions were used to adjust the data so that rational averages and sums could be accomplished:

- If no minimum was provided, but a maximum was provided, the minimum was assumed to be zero.
- If a maximum was provided, but no average, the average was assumed to be one half the sum of the maximum and minimum.
- If an average was provided but no minimum or maximum, the average was assigned to the minimum and maximum.
- If only a minimum was provided, the minimum was assigned to both the maximum and the average.

For those waste streams that did not have any waste parameter information provided, but which could be assigned to a final waste form, an average set of parameters was calculated and used. This average set of parameters was calculated by volume averaging the parameters provided for other waste streams with the same final waste form.

The data that is printed out on all the tables in the report is based on these calculations and assumptions. The individual stream data printed out in Appendix A is the original unmanipulated data submitted by the generator/storage sites or agreed to by the sites through discussions and questions with the WTWBIR team.

The roll ups of these material parameters for tables in the report by Final_Waste_Form or by site were performed using a volume weighted averaging procedure . The averages for the material parameters for a Final_Waste_Forms (FWF) are calculated as follows:

$$\text{Average Density of FWF parameter}_{i;} = \text{Density of Parameter}_i \times \frac{(\text{Volume in Stream}_i)}{(\text{Total Volume in FWF})} + \cdots$$

where i is an index representing individual waste streams of the same FWF.

The minimum density is chosen as the smallest minimum density of a particular material parameter in the WTWBIR streams in a particular Final_Waste_Form. The maximum density is chosen in a similar manner except that the largest maximum density was chosen. Note that the maximum and minimum densities apply to individual containers and cannot be used to directly calculate a maximum and minimum density of particular material parameters for the entire WIPP inventory. Also note, that it is possible, that the maximum density may not be a true maximum but a maximum average density, if a site provided only averages and no maximums and these averages are higher than other sites' maximums.

The amount of and type of materials in the containers and liners was requested separately in the waste stream profiles. Many of the sites did not provide data for final form WIPP approved containers. Some sites provided current containers, some did not provide containers and some provided final form containers. In order to add up packaging materials for the waste as it would arrive at WIPP, standard container configurations were assumed for waste from all sites.

If the site provided final form containers, the final form containers (drums, SWBs, or RH Canisters) were used, but standard liners were assumed. This was done because many sites did not provide liner information and assuming standard liners will generally maximize the amount of liner material.

For CH waste containers, the following assumptions were used:

- If the type of container was unclear, it was assumed to be drums. (This was rare.)
- If drums were reported they are assumed to be WIPP approved drums with rigid liners. Many sites have a mixture of liner types in a stream or are unsure of liners.
- If waste was reported in containers larger than drums, then the waste was divided into (Standard Waste Boxes) SWBs with standard plastic bag liners; using the standard internal volume for SWBs and the reported waste stream volumes to determine the number of SWBs.
- If the waste was reported in a liquid or sludge form (i.e. tanks), it was assumed to be placed in drums with rigid liners. No treatment volume expansion was included unless provided by the site.

For RH waste, the following assumptions were used:

- If the waste was reported in drums, the drums were assumed to be overpacked in RH canisters at 3 drums per canister.
- If the waste was not reported to be in drums, the waste was assumed to be direct loaded into RH canisters; using the standard internal volume for RH canisters and the reported waste stream volumes to determine the number of RH canisters.

Packaging material weights used in the WTWBIR report are shown in the table below:

Table 7-1. Table of Materials for CH and RH Waste Containers (Weights in kg per container, Volume in m^3 per container)

CH Waste			
Container Characteristic	**Drum**	**SWB**	**SWB Overpack[1]**
Steel Weight	27.3	290.9	400.1 (include. 4 drums
Liner Type	Rigid Drum Liner	Bag	Rigid Drum Liners and Bag
Liner Material	90 mil HDPE	Plastic	90 mil HDPE and Plastic
Liner Weight	7.7	2.2	33
Volume (Capacity)	0.208	1.89	1.89
Payload Volume[2]	0.208	1.89	0.832 (4 drums)

RH Waste		
Container Characteristics	**RH Canister**	**RH Canister Overpack[3]**
Steel Weight	387.3	469.2 (3 drums)
Lead Weight	413.6	413.6
Steel Plug Weight	1909.1	1909.1
Liner Type	None	Rigid Liner in Drums
Liner Material	N/A	90 mil HDPE
Liner Weight	N/A	23.1
Volume (Capacity)	0.89	0.89
Payload Volume[2]	0.89	0.624 (3 drums)

[1] Four drums overpacked in an SWB
[2] Payload volume is the actual volume of waste which can be placed in the container.
[3] Three drums overpacked in an RH Canister

The tables and reports for the WTWBIR were produced using the facilities provided by the Microsoft Access Vs 2.0 database system. These tables and reports consist primarily of various sorts based on waste streams, final waste forms, sites, etc. and summations of volumes and material parameter weights.

127

7.2 DATA DICTIONARY

Table 7-2. WTWBID Data Dictionary

Field/Table Name	Notes	Description
Table: Container_Data WIPP_ID	Key Field Index Relating from Page_1 data table	The unique waste stream identification number as assigned by the WTWBIR Team
MWIR_ID		The unique waste stream identification number as listed in the Mixed Waste Inventory Report
Cont	Key Field to relate to Nuclides data table	Container (SWB, Stnd Drum, or RH Canister)
Counter		Access 2.0-generated record identifier
MWIR_Cont		The type of container as listed in the MWIR
Type/Size		type and/or size of container
Param		Parameter Information Reported?
RAD		Yes - Isotopes listed; No - None Listed; Quan - Concentrations listed
Container Material		Material of which the waste container is made
Ext_Volume		cubic meters per container
Liner_type		Nomenclature identifying the type and size of liner.
Liner_material		composition of liner
Nbr_Stored		number of this type of container stored.
Nbr_Projected		Total number of this container for this waste stream projected through the life of the WIPP
IB_avg		Iron-based constituents, Average, in kg/m3
IB_min		Iron-based constituents, Minimum, in kg/m3
IB_max		Iron-based constituents, Maximum, in kg/m3
AB_avg		Aluminum-based constituents, Average, in kg/m3
AB_min		Aluminum-based constituents, Minimum, in kg/m3
AB_max		Aluminum-based constituents, Maximum, in kg/m3
OM_avg		Other metals constituents, Average, in kg/m3
OM_min		Other metals constituents, Minimum, in kg/m3
OM_max		Other metals constituents, Maximum, in kg/m3
OI_avg		Other inorganics constituents, Average, in kg/m3

128

Table 7-2. WTWBID Data Dictionary (continued)

Field/Table Name	Notes	Description
OI_Min		Other inorganics constituents, Minimum, in kg/m3
OI_max		Other inorganics constituents, Maximum, in kg/m3
Cel_avg		Cellulosics constituents, Average, in kg/m3
Cel_min		Cellulosics constituents, Minimum, in kg/m3
Cel_max		Cellulosics constituents, Maximum, in kg/m3
Rub_avg		Rubber constituents, Average, in kg/m3
Rub_min		Rubber constituents, Minimum, in kg/m3
Rub_max		Rubber constituents, Maximum, in kg/m3
Plas_avg		Plastic constituents, Average, in kg/m3
Plas_min		Plastic constituents, Minimum, in kg/m3
Plas_max		Plastic constituents, Maximum, in kg/m3
SIM_avg		Solidified Inorganic Materials constituents, Average, in kg/m3
SIM-min		Solidified Inorganic Materials constituents, Minimum, in kg/m3
SIM_max		Solidified Inorganic Materials constituents, Maximum, in kg/m3
SOM_avg		Solidified Organic Materials constituents, Average, in kg/m3
SOM_min		Solidified Organic Materials constituents, Minimum, in kg/m3
SOM_max		Solidified Organic Materials constituents, Maximum, in kg/m3
SL_avg		Soils, Average, kg/m3
SL_min		Soils, Minimum, kg/m3
SL_max		Soils, Maximum, kg/m3
PM_Steel		Packaging materials, steel, kg/m3
PM_Plastic		Packaging materials, plastic, kg/m3
End_of_92		Volume of this waste stream as of the end of 1992
Projected_end_of_92		Projected volume of this waste stream as of the end of 1992
FF_End_of_92		The Volume of this waste stream on hand at end of 1992 in it's estimated final waste form to ship to the WIPP
FF_Projected_end_of _92		Not used.
End_of_93		The cumulative waste volume at the end of the year.

129

Table 7-2. WTWBID Data Dictionary (continued)

Field/Table Name	Notes	Description
FF_End_of_93		The cumulative waste volume of the waste on hand at end of year in its estimated final form for shipment to the WIPP.
End_of_94		The new waste volume at the end of the year; the increment added during the year
FF_End_of_94		The new waste volume of the waste on hand at end of year in its estimated final form for shipment to the WIPP, the increment added during the year
End_of_95		The new waste volume at the end of the year; the increment added during the year
FF_End_of_95		The new waste volume of the waste on hand at end of year in its estimated final form for shipment to the WIPP, the increment added during the year
End_of_96		The waste volume at the end of the year; the increment added during the year
FF_End_of_96		The new waste volume of the waste on hand at end of year in its estimated final form for shipment to the WIPP, the increment added during the year
End_of_97		The waste volume at the end of the year; the increment added during the year
FF_End_of_97		The new waste volume of the waste on hand at end of year in its estimated final form for shipment to the WIPP, the increment added during the year
98-2002		The waste volume added per year during the period.
FF_98-2002		The waste volume added per year during the period in its estimated final form for shipment to the WIPP.
03-2022		The waste volume added per year during the period.
FF_03-2022		The waste volume added per year during the period in its estimated final form for shipment to the WIPP.
Comments		Miscellaneous comments applicable to page 2 of the data form
Container_-Footnotes		Footnotes applicable to a specific container type in a waste stream.
Table: Page_1 Site_Name		Name of site, text spelled out as specified in a look-up table (ANL-E, Hanford, INEL, AMES, etc.).
MWIR_ID		Unique Waste Stream Number derived from the Mixed Waste Inventory Report.
WIPP_ID	Key field to relate to container_data and EPACodes data tables	WIPP specific identification number assigned by WTWBIR Team.

130

Table 7-2. WTWBID Data Dictionary (continued)

Field/Table Name	Notes	Description
LOCAL_ID		Locally assigned ID number for the waste stream
Gen_Site		The name of the site that generated the waste, regardless of the actual storage site.
Waste_Type		MTRU or TRU
Handling		CH or RH
Stream_Name		Abbreviation Description/Name of the Stream
Stream_description		Memo field to describe the type of stream
MWIR_matrix_code		Matrix Code, from MWIR if applicable and relevant
Assigned_matrix_code		Matrix Code assigned by WTWBIR analysts... to be left blank by sites
Final_Waste_Form		This is the code of the final (to WIPP) form of the waste stream
Matrix_Description		Description and comments for the waste matrix in its final form for the WIPP
TRUCON		Assigned TRUCON Code
NoMigrationAssign		Code assigned for purposes of the WIPP No Migration Variance Petition.
IDC_from_Site_-Final_Form		IDC supplied by Site for this stream.
IDC_Assigned_Final_Form		Equivalent IDC assigned by WTWBIR analysts based on their judgement
Waste_Ownership		Defense, non-defense, commercial, or unknown
Waste_mixed_type		Mixed, non-mixed, suspect mixed, or unknown
Waste_source		R&D, Operational, Residues, ER and D&D, ER, D&D, or Unknown

131

Table 7-2. WTWBID Data Dictionary (continued)

Field/Table Name	Notes	Description
TSCA_data		Asbestos, PCBs, Asbestos & PCBs, Other (describe in comment), No, N/A, or Unknown
Storage_data		Retrievably stored, Buried, Building Storage, or Bermed Storage
Page 1_Footnotes		Footnotes applicable to the whole waste stream.
Table: epacodes UNIQUE_WS	Key Field, related to Page_1, WIPP_ID	Unique waste stream identifier number.
EPA_CODE		EPA code associated with a specific waste stream.
Table: Nuclides Cont_Counter	Key Field related to Container_Data, Counter	Relation to Container data counter, lock the record to a specific container/stream record in Container_Data.
Nuclide		Nuclide designation in form Element Abbreviation, Atomic Weight, and excitation indicator if applicable (Ba137M).
Activity		Scientific notation of activity in Pu239 equivalents in Curies/m3.

7.3 DATABASE OPERATING INSTRUCTIONS

The WIPP Transuranic (TRU) Waste Baseline Inventory Report (WTWBIR), Revision 1, database is a Microsoft Access 2.0 database. It requires the user to possess a copy of Access 2.0 and be running under the Windows 3.1 operating system. Access, unlike most other databases, provides a single structure that contains objects such as queries, reports, program segments, macros, indexes, relations, and multiple data tables. This means there is only one file to work with, one with the suffix, .MDB. A second file normally accompanies the database file, one with the suffix .LDB and having the same name. It is not normally used except for certain file maintenance operations.

Two databases are provided as part of the compressed file on the distribution disk. The first database is WTWBIR_1, which contains the original data by waste streams from all generator/storage sites. This is the database used to print out the individual stream data in

132

Appendix A. The second database is called REPORTS. This is the database used to produce the other tables and figures in Volume 1 and Appendix B of the report. The databases are separate because the roll ups of data require some changes to the data to produce rational numbers in the tables and figures. These changes were described in section 7.2.

INSTALLATION: The two databases are compressed into a file on the distribution disk called WTWBIR.EXE. Approximately 6 megabytes of hard disc space should be available to install the database. To install the WTWBIR Rev. 1 database, copy WTWBIR.EXE to a convenient directory on your hard disk, go to the directory containing WTWBIR.EXE, type WTWBIR and press the enter key. The database should be expanded into the directory. The directory should now contain WTWBIR.EXE, WTWBIR1.MDB, WTWBIR1.LDB, WTWBIR.HLP, REPORTS.MDB, and REPORTS.LDB. WTWBIR.HLP contains the data field descriptions. This procedure can be performed either in DOS, a DOS prompt in Windows or from File Manager in Windows. Enter Windows and start Access, and open the WTWBIR_1 or REPORTS database. See the Access User's Manual in case of difficulty.

WTWBIR_1 INSTRUCTIONS: The WTWBIR Rev. 1 database has a built-in program (a macro called "autoexec") which takes control immediately upon opening the database file. It brings up a screen from which the user can view, edit, and locate various waste streams using the normal Access 2.0 tool bar features. In addition, a large printer icon button appear midway down the left side of the screen. This button affords the user the opportunity of printing the waste stream being viewed, waste streams for a specific site, or waste streams for all sites in the database. Scroll bars are provided to scroll between waste streams at the bottom left of the screen. For a given waste stream, the gray section contains waste container data for the various containers used to store this stream, and a scroll bar is provided in the bottom left to scroll among the types of containers for that waste stream. For a given type of container, the typical nuclides for that type of container are listed in a white area inset into the gray and a scroll bar provided.

Mirroring the contraction of the view screen, the WTWBIR data table set consists of the main table, Page_1, which contains site and stream data applicable to all container types used for the stream. Using the waste stream identification code (WIPP_ID) as a key, container-specific data in the Container_Data data table is related to the Page_1 table. Where radionuclides exist in a waste stream, they are listed in the Nuclides table and related to the Container_Data using record counters. For mixed streams, another data table, EPACodes, is related from Page_1's MWIR_ID field to EPACodes' UNIQUE_WS field. This structure affords a considerable savings in database size and is implemented in Access in such a way that they effectively function as one large, compact table.

Descriptions of the data fields can be viewed by opening the desired data table in Access's Table Mode, Design View. If the WTWBIR_1.HLP file was copied into the directory occupied by the WTWBIR database files, limited descriptions of the data fields in the WTWBIR database are available when you place the cursor in a data box and then press the F1 function key.

Reports Instructions:

Open the database REPORTS.MDB. An "autoexec" macro executes when the database opens. This macro presents a form, titled "Figure and Table Viewer", listing the reports available for viewing.

The reports and tables available for review are listed with a number on the left side. There should be eleven entries. If all entries cannot be seen, the scrolling arrows on the right side of the form can be used to scroll the entries. On the bottom of the form is a series of buttons numbered 1 to 11. Each form can be viewed (in report preview mode) by clicking on the command button with the same number as the number to the left of the list of figures and tables.

When the table appears on screen, the size of the window for viewing the table can be adjusted by clicking on the upper right corner up or down arrow in the report window. The report preview window also permits moving between pages of multi-page sets of figures and tables by using the arrows on the lower left corner.

The table or figure can be printed from the report preview window. The tales and figures were originally printed from and formatted for a Laserjet III. When printing the tables and figures, make sure the margins are set so that the entire table or figure is contained on one page, other wise blank pages may be printed.

The first 8 tables and figures are the same as the tables and figures printed in volume 1 and Appendix B of this report. The figure and table numbers listed are the same as the figure and table numbers in the report. Figures number 9 and 10 show the average material parameters by site for contact handled and remote handled waste. These figures were not used in the report. The last table shows the estimated WIPP packaging material parameters. These numbers are also presented on Tables 5-1 and 5-2 in this viewer and in Volume 1 of the report.

7.4 WTWBID QUALITY CONTROL

To ensure that proper controls and documentation were in place during development and population of the WTWBID, several quality control activities were implemented by the WTWBIR Team. Project quality control objectives were to:

- Define a method for receiving, tracking, reviewing, updating, and documenting data received from the waste generator/storage sites.
- Identify and document the contents of each project baseline.
- Establish and implement a process for releasing and maintaining the WTWBID.
- Create a master library for WTWBID software and documentation.
- Ensure that WTWBID-generated reports and database copies are produced from released database revisions.

The activities performed to meet these objectives are described in the Waste Isolation Pilot Plant Baseline Inventory Report Database Management Procedure (DOE, 1995). The procedure identifies the responsible individuals and required actions for developing, populating, and maintaining the WTWBID, and for managing the data used to produce the WTWBIR and other summary documents.

CHAPTER 8

8. GLOSSARY

40 CFR Part 191, Protection of Environment. EPA: Environmental Radiation Protection Standards for Management and Disposal of Spent Nuclear Fuel, High-Level and TRU Radioactive Wastes – The EPA's environmental standards for the storage (Subpart A) and disposal (Subpart B) of spent nuclear fuel, and high-level and TRU radioactive wastes. This is the primary post-closure standard that applies to WIPP. It limits annual radiation doses to the public from waste management storage and disposal facilities.

40 CFR Part 268, Protection of Environment. EPA: Land Disposal Restrictions – Restricts the land disposal of all hazardous wastes and specifies strict treatment standards that must be met before these wastes can be land-disposed.

Americium (Am) – A TRU radionuclide having an atomic number of 95, containing 95 electrons and 95 protons. Am-241 (half-life 432.7 y) results from the decay of Pu-241 (half-life 14.4 y). Waste initially rich in Pu-241 will therefore "grow" in Am-241 for several decades as the Pu decays. Am-241 exists in finite amounts in TRU waste at some DOE sites.

Anticipated Inventory – The sum of the stored and projected inventories, as defined in this document.

Buried Waste – TRU waste buried in shallow trenches prior to the 1970 Atomic Energy Commission policy that required TRU waste to be retrievably stored.

Californium (Cf) – A TRU element having an atomic number 98 (the number of protons in the nucleus). An alpha emitter (half-life 2.64 y), Cf-252 also spontaneously fissions, thus making it desirable as a neutron source. Cf-252 is created by neutron bombardment of Cm-244 targets. OR is the only production agency for Cf. As a result, the OR inventory is the only TRU waste inventory showing finite quantities of this element.

Code of Federal Regulations (CFR) – (1) A codification of the general and permanent rules published in the **Federal Register** by the department and agencies of the federal government. The CFR is divided into 50 titles that represent broad areas subject to federal regulation. It is issued quarterly and revised annually. (2) All federal regulations in force are published annually in codified form in the CFR.

Contact-Handled (CH) TRU Waste – Packaged TRU wastes with an external surface dose rate of 200 mrem or less per hour.

Curie – A quantitative measure of radioactivity equal to 3.7×10^{10} disintegrations per second.

Curium (Cm) – A TRU element having an atomic number of 96 (the number of protons in the nucleus). An alpha emitter (half-life 18.1 y), Cm-244 is used for neutron bombardment of targets for the production of Cf-252 at OR. In spite of its half-life being less than 20 years, OR considers and handles Cm-244 as a TRU nuclide. Some TRU waste at both OR and SR contains Cm-244.

136

Decontamination and Decommissioning (D&D) – The process through which DOE facilities which are no longer operational are cleared of contamination and removed from service. In particular, a reference to D&D waste is a reference to the waste materials that are generated during D&D activities.

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 purview of the Nuclear Regulatory Commission or generated by the commercial nuclear power industry. (2) Nuclear waste derived mostly from the manufacture of nuclear weapons, weapons-related research programs, the operation of naval reactors, and the decontamination of 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.

Design Capacity – The planned waste capacity of the Waste Isolation Pilot Plant.

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. For example, disposal of wastes in a mined geologic repository occurs when all of the shafts to the repository area are backfilled and sealed.

Disposal Inventory – The **total** inventory defined for WIPP emplacement (after scaling) to be used for SPM and PA calculations.

Environmental Restoration (ER) – Those activities associated with the remediation of sites contaminated with hazardous and/or radioactive materials. In particular, a reference to remediation activities conducted under the auspices of the DOE Office of Environmental Restoration and Waste Management, Office of Environmental Restoration, EM-40.

Federal Facility Compliance Act (FFCAct) – Public law 102-386, 1992.

Gas Production – Three gas generation processes are expected to be a factor in the degradation of TRU wastes in the WIPP repository. The generation of gaseous species is expected to occur through chemical (i.e., corrosion), microbial, and radiolytic processes.

Generator/Storage Sites – See Waste Generator/Storage Sites.

Hazardous Waste – Those wastes that are designated hazardous by EPA (or state) regulations through the RCRA.

Integrated Data Base (IDB) – The latest version of the IDB, the *Integrated Data Base for [CY]: U.S. Spent Fuel and Radioactive Waste Inventories, Projections, and Characteristics* (DOE, 1994b)

Mixed TRU Waste – TRU waste that contains both radioactive and hazardous components as defined by the Atomic Energy Act and the RCRA as codified in 40 CFR Parts 263, 265, 268, and 270 (EPA, 1980a; 1980b; 1986; and 1983).

Mixed Waste Inventory Report (MWIR) – The latest release of information from the MWIR database that supports requirements under the FFCA of 1992 (Public Law 102-386). The latest version of the MWIR documentation/files is *Distribute of Phase II Mixed Waste Inventory Report Data*, dated May 17, 1994 (DOE, 1994a). This information replaces the Phase I MWIR release (DOE, 1994c).

Newly Generated Wastes – See Projected Inventory.

No-Migration Variance Petition (NMVP) – Section 3004 of RCRA allows EPA to grant a variance from the land disposal restrictions when a determination can be made that, to a reasonable degree of certainty, there will be no migration of hazardous constituents from the disposal unit for as long as the waste remains hazardous. Specific requirements for making this demonstration are found in 40 CFR 268.6, and EPA has published a draft guidance document to assist petitioners in preparing a variance request.

Non-Mixed TRU Waste – Transuranic waste that does not contain hazardous constituents or exhibit hazardous characteristics, as identified in 40 CFR 261, Subparts C and D.

Performance Assessment (PA) – (1) A systematic analysis of the potential risks posed by waste management systems to the public and environment and a comparison of those risks to established performance objectives. (2) An analysis that (a) identifies the processes and events that might affect the disposal system, (b) examines the effects of these processes and events on the performance of the disposal system, and (c) estimates the cumulative releases of radionuclides, considering the associated uncertainties, caused by all significant processes and events. These estimates shall be incorporated into an overall probability distribution of cumulative release to the extent practicable. (3) A term used to denote all activities (qualitative and quantitative) carried out to (a) determine the long-term ability of a site/facility to effectively isolate the waste and ensure the long-term health and safety of the public and (b) provide the basis for demonstrating regulatory compliance.

Plutonium (Pu) – A radionuclide having an atomic number of 94. Pu isotopes exist in some TRU waste at all the major DOE storage facilities. The significant isotopes that may exist in measurable quantities at these facilities are Pu-238 through Pu-242. Each isotope is an alpha emitter; the respective half-lives in years are: 238=87.7, 239=24,000, 240=6,563, 241=14.4, 242=376,000. Because of its high activity, Pu-238 can contribute significantly to the thermal loading on some TRU waste. Pu-241 decays, primarily by beta emission, to Am-241.

Process Knowledge – A qualitative evaluation of the contents of a waste container through the study of existing records of production history of the waste.

Projected Inventory – That part of the inventory that has not been generated but is estimated to be generated at some time in the future by the TRU waste generator/storage sites. The estimated timeframe may vary, but is usually between 20 and 30 years. "Newly generated waste" also is sometimes used as a synonym for the projected inventory.

138

Radioactive – The emission of radiation from unstable atomic nuclei.

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 neutron, and the energy content.

Remote-Handled (RH) TRU Waste – Packaged TRU wastes with an external surface dose rate exceeding 200 mrem per hour.

Repository – Designated location for disposal of transuranic wastes; the Waste Isolation Pilot Plant.

Resource Conservation and Recovery Act (RCRA) – (1) Establishes a system for controlling hazardous waste from generation to disposal. (2) A Federal law passed in 1976, and amended under the HSWA of 1984, that established a structure to track and regulate hazardous wastes from the time of generation to disposal. The law requires safe and secure procedures to be used in treating, handling, transporting, storing, and disposing of hazardous substances. RCRA is designed to prevent new uncontrolled hazardous waste sites. The law also regulates the disposal of solid waste that may not be considered hazardous. (3) Specifically, Subtitle D of RCRA governs the management of solid waste. (Note: 40 CFR Parts 260-281 are the regulations for complying with RCRA with respect to hazardous waste and hazardous waste treatment, storage, and disposal facilities.)

Retrievable Storage – Designated storage location for transuranic wastes that is designed, operated, and maintained in such a manner that the wastes remain accessible for subsequent retrievable operations.

Scaling – The process for adjusting the anticipated inventory to the design limit (disposal inventory) of the WIPP repository.

Site-Specific Waste Profile – Represents a WMCG at a particular DOE TRU waste generator/storage site. That is, one or more waste stream profiles, at a particular DOE TRU waste site, that have been placed in the same WMCG are summarized in the site-specific waste profile.

Stakeholders – Those persons and/or groups of people and organizations who are affected or perceive they are affected by the DOE waste management program. Stakeholders include DOE management, employees, and contractors (internal); and executive, legislative, and regulatory groups, public representatives, the general public, intervenor groups, special interest groups, contractors, suppliers, and universities (external).

Stored Inventory – That part of the TRU inventory currently in retrievable storage as of the time of the last data call for inventory information. Retrievably stored waste includes waste stored in buildings or in berms with earthen cover since 1970 and **does not include any waste that was buried prior to 1970.**

139

System Prioritization Methodology (SPM) – The SPM is a process formulated to identify a set of activities (required experiments, modeling, engineering design, and waste acceptance criteria) that will lead to regulatory compliance. The process is formulated such that it also: (1) addresses stakeholder and regulator concerns early and throughout the regulatory process and (2) leads to a fully defensible performance assessment to be used in demonstrating regulatory compliance. Ultimate products and associated customers are:

(1) A decision matrix containing the most likely sets of activities that will lead to compliance as a function of time and budget to be delivered to the WIPP program manager,
(2) A performance assessment built on assumptions and data that are defensible in the eyes of the stakeholders and the regulators to be delivered to the regulatory compliance branch of Carlsbad Area Office/WIPP through the Westinghouse Waste Isolation Division and ultimately to the EPA, and
(3) A set of regulatory issues and their current status that result from the SPM process and are to be included in compliance packages by the Westinghouse Waste Isolation Division.

Thorium (Th) – A radionuclide having an atomic number of 90. Although not TRU, Th-232 is an alpha emitter (half-life 14 billion years) and exists in finite amounts in some TRU waste at HA, IN, and OR. [Note: Thorium is naturally occurring and contributes to background radiation at some sites (e.g., IN)]

Transuranic – Pertaining to elements that have atomic numbers greater than 92, including neptunium, plutonium, americium, and curium; all are radioactive, are products of artificial nuclear changes, and are members of the actinide group.

Transuranic (TRU) Waste – (1) Waste containing alpha-emitting radionuclides with an atomic number greater than 92 and half-lives greater than 20 years, at concentrations of TRU isotopes greater than 100 nanocuries per gram of waste. **This core definition appears in modified form in various relevant documents as follows**: (a) For purposes of management, DOE Order 5820.2A: (i) considers TRU waste, as defined above, "without regard to source or form" *(The proposed revision to the Order [DOE Order 5820.2A Major Issues for Revision, May 6, 1992]* contemplates removing this clause); (ii) allows head of field elements to determine that wastes containing other alpha-emitting radionuclides must be managed as TRU waste; and (iii) adds "at time of assay," implying both that the classification of a waste as TRU waste is to be made based on an assay, and that such classification can be superseded only by another assay. (b) For purposes of setting standards for management and disposal, 40 CFR 191.02(i) adds "except for: (i) high-level wastes; (ii) wastes that the DOE has determined, with the concurrence of the EPA Administrator, do not need the degree of isolation required by this part; or (iii) wastes that the Nuclear Regulatory Commission has approved for disposal on a case-by-case basis in accordance with 10 CFR 61. (2) Waste materials contaminated with U-233 (and its daughter products), with certain isotopes of plutonium, or with other nuclides with atomic numbers greater than 92. In order to be classified as TRU waste, the long-lived alpha activity from subject isotopes must exceed 100 nanocuries per gram of waste material and from the use of plutonium in the fabrication of nuclear weapons. (3) Wastes that are contaminated with radioactive elements heavier than uranium, thus the name trans-(or beyond) uranic.

TRUCON – See TRUPACT-II Content Code.

140

TRUPACT-II Content Codes (TRUCON) – The document containing a description of the waste stream, waste form, and package configuration for each waste content code authorized for shipment in TRUPACT-II containers.

Unknown Waste Stream – Those waste streams for which there is insufficient process knowledge to assign a specific WMC.

Uranium (U) – A naturally radioactive element with the atomic number of 92 (number of protons in the nucleus) and an atomic weight of approximately 238. The two principal naturally occurring isotopes are the fissionable U-235 (0.7 percent of natural uranium) and the fertile U-238 (99.3 percent of natural uranium). (Note: An alpha emitter [half-life 159,000 y], U-233 also spontaneously fissions; it is present in finite quantities in some TRU waste inventories at INEL and ORNL.)

Waste Acceptance Criteria (WAC) – The criteria used to determine if waste packages are acceptable.

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

Waste Generator/Storage Sites – The 10 largest DOE facilities and several smaller sites throughout the U.S. that produce and store TRU waste.

Waste Isolation Pilot Plant (WIPP) – (1) The project authorized under Section 213 of the DOE National Security and Military Applications of Nuclear Energy Authorization Act of 1980 (Public Law 96-164; 93 Stat. 1259, 1265) to demonstrate the safe, and environmentally sound, disposal of radioactive waste materials generated by atomic energy defense activities. (2) A research and development facility, located near Carlsbad, New Mexico, to be used for demonstrating a practical, long-term solution to a complex problem: the safe disposal in deep geologic repositories of TRU waste resulting from DOE activities. (3) The WIPP has two primary objectives. First, the WIPP is investigating the behavior of salt rock and interactions between the salt rock and radioactive wastes in a variety of forms. Second, the WIPP seeks to demonstrate the safe and efficient handling, transportation, and disposal of TRU waste in an actual facility.

Waste Material Parameter – A waste material that occurs in TRU waste that is an input parameter into one or more current SPM or PA models, an SPM or PA model under development, a potential future model, or is required to adequately describe the waste form.

Waste Matrix Code (WMC) – A DOE-developed coding system for organizing waste streams by their physical and chemical properties. A WMC is assigned to each waste stream by the DOE TRU waste generator/storage site. The WMC for each waste stream can be found in the Mixed Waste Inventory Report (DOE, 1994a). This coding system allows waste streams within the DOE TRU waste system that have similar physical and chemical waste form properties to be categorized together. WMCs also have been called "waste treatability codes" in other DOE documents. Appendix C contains the DOE guidance document to help categorize individual waste streams. An example of a WMC for "heterogeneous waste" would be 5400.

Waste Matrix Code Group (WMCG) – Consists of a series of WMCs that for SPM or PA purposes has similar physical and chemical properties.

141

Waste Stream – Individually, those stored or projected wastes that are defined by a unique identifier in the MWIR.

Waste Stream Name – A site-specific, unique descriptive identifier for a TRU waste stream.

Waste Stream Profile – A description of a CH-TRU or RH-TRU waste stream destined for shipment to and disposal in WIPP, if authorized under permits and certifications by appropriate regulatory agencies for disposal in the WIPP repository. The waste stream profile is presented in tabular format and is intended to provide a summary of the important information about a particular waste stream.

Waste Stream Site ID – A site-specific alphanumeric identification code which provides a unique identifier for an individual TRU waste stream.

WIPP Waste Profile – Represents a summary of TRU waste at all DOE TRU waste generator/storage sites that have an identical WMCG.

142

CHAPTER 9

9. REFERENCES

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144

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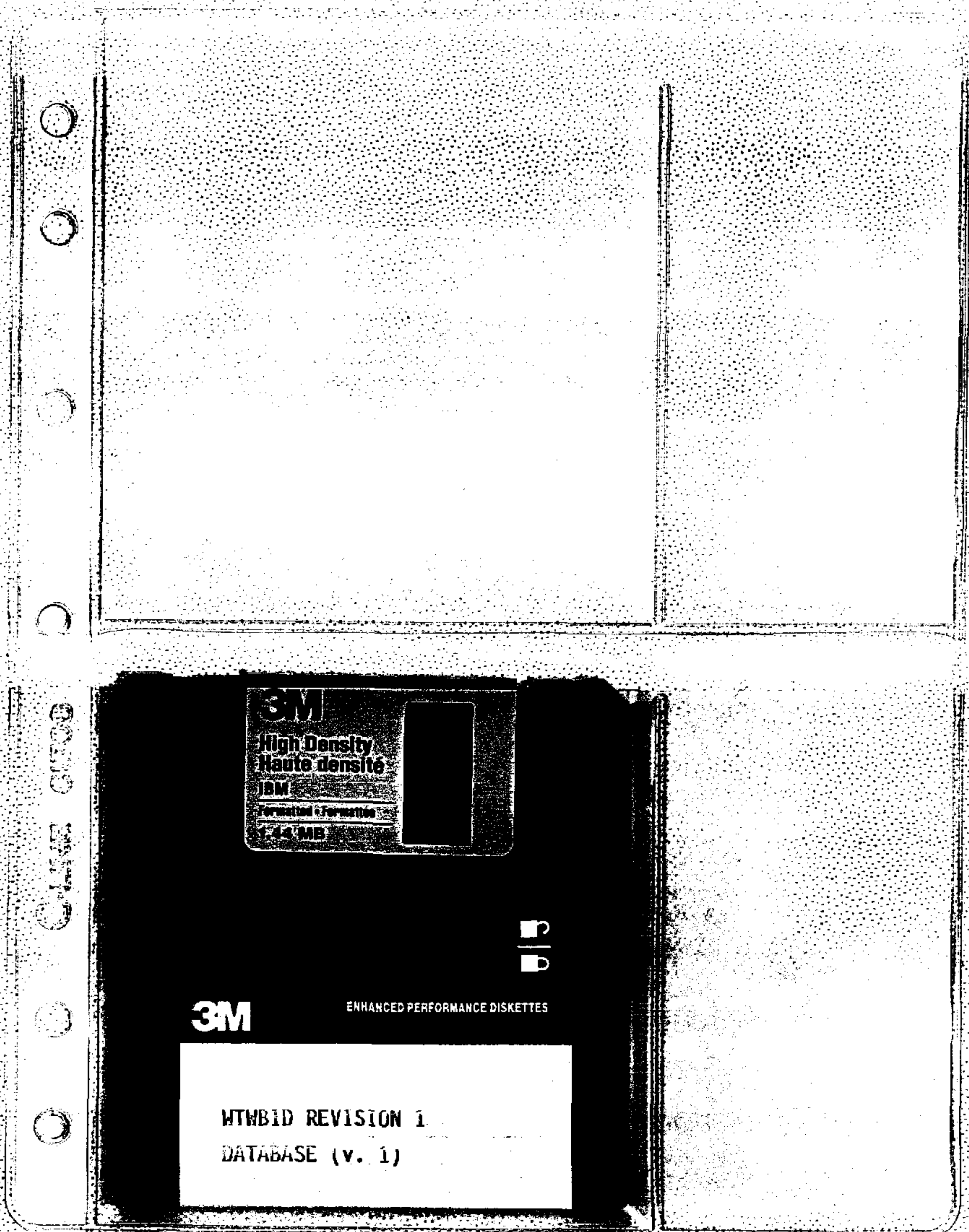
145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WTWBID REVISION 1
DATABASE (v. 1)

CAO-94-1005
Revision 1

Waste Isolation Pilot Plant Transuranic Waste Baseline Inventory Report

February 1995

Volume 2

CAO-94-1005
Revision 1

Waste Isolation Pilot Plant Transuranic Waste Baseline Inventory Report

February 1995

Prepared by WIPP Technical Assistance Contractor
for U.S. Department of Energy
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Volume 2

148

APPENDIX A

Ames Laboratory

APPENDIX A
WASTE STREAM PROFILES

AMES LABORATORY (AL)
WASTE STREAM PROFILES

The following modifications were made by the WTWBIR team in developing the AL waste stream profiles:

- AL Final Waste Form Groups were modified to be consistent with the nomenclature used in the WTWBID. These changes included word and spelling changes. The assigned Final Waste Form Groups are consistent with the information provided by AL.
- A data entry error was made on the original form for the number of containers stored at AL. This error was corrected.
- The projected volumes reported by AL were not distributed to individual years. Based on the footnotes provided by AL, these volumes were distributed by the WTWBIR team for both current and final form volumes for the years 2003-2022.
- The volume of the final waste form assumes a 2.5 volume expansion factor for solidification.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AL

WASTE TYPE MTRU   HANDLING CH   GENERATOR SITE AL

WASTE STREAM

MWIR ID	AL-W005
WIPP ID	**AL-W005**
Local ID	Glovebox
MATRIX CODE	1000
SITE FINAL FORM IDC	
Waste Matrix Code Group	Solidified Inorganics

STREAM NAME Aqueous Liquids/Slurries

DESCRIPTION Mixed Transuranic/Uranium in Glovebox

Site Matrix Description This waste stream will be generated during the remediation of a glovebox that has been used for plutonium and other transuranic research. The glovebox continues to be used for transuranic research. Some of the contents of the glovebox will become MTRU waste. It has not yet been determined what volume will be MTRU and what will be TRU. Isotopes that are known to be in the glovebox are: Pu-239, Pu-240, Pu242, Np-237, Pa-233, U-235, U-236, and U-238. Concentrations of the TRU components range from 1 pph to 2300 ppm in various concentrations of nitric acid. Uranium concentrations range from 0.1 pph to 407,770 ppm.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown	X	Decon and Decommissioning			N/A	
				Environmental Restoration			Unknown	X
				From Treatment of Waste				
				Maintenance				

152

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AL | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE AL

AL-W005

CONTAINER:	Drum	Container Matl:	Steel	Liner Type:	
Type/Size:		Int. Vol/Ctnr:	0.208 m3	Liner Material:	

Number Stored: 0
Number Projected: 1

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	394.2	173.1	528.8
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	399.0	173.1	528.6
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.000	0.000	m3
End of 1993:	0.000	0.000	m3
1994:	0.000	0.000	m3/yr
1995:	0.000	0.000	m3/yr
1996:	0.000	0.000	m3/yr
1997:	0.000	0.000	m3/ry
1998-2002:	0.000	0.000	m3/yr
2003-2022:	0.005	0.005	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Np237	4.00E-03	Curies/m3
Pu239	7.70E-02	Curies/m3
Pu242	5.30E-03	Curies/m3
U235	1.70E-05	Curies/m3
U238	5.60E-10	Curies/m3

TYPICAL EPA CODES APPLICABLE

D002B
D004A
D005A
D006A
D007A
D008A
D010A
D011A

Comments

Assumptions:
1. Transuranic waste will be generated through research and development. The isotopes are currently housed in a glovebox with the appropriate HEPA filters.
2. TRU waste will only be generated when the research project is complete or when the filters are replaced. Therefore, there will be no TRU waste generation until CY2004 at the earliest.
3. Ames Laboratory plans to utilize the storage services of Hanford for TRU waste pending the opening of WIPP.

Argonne National Laboratory – East

ARGONNE NATIONAL LABORATORY-EAST (AE)
WASTE STREAM PROFILES

The following modifications were made by the WTWBIR team in developing the AE waste stream profiles:

- AE Final Waste Form Groups were modified to be consistent with the nomenclature used in the WTWBID. These changes included word and spelling changes. The assigned Final Waste Form Groups are consistent with the information provided by AE.
- The volumes for the year 1993 were changed from an annual rate of generation (m^3/year) to a cumulative value (m^3).
- A data entry error was made on the original form for the number of containers stored at AE. This error was corrected.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AE

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** AE

WASTE STREAM MWIR ID	
WIPP ID	AE-T001
Local ID	Not reported
MATRIX CODE	
SITE FINAL FORM IDC	
STREAM NAME	
DESCRIPTION	Non-mixed TRU derived from IDB
Waste Matrix Code Group	Solidified Inorganics
Site Matrix Description	

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

156

157

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AE

WASTE TYPE TRU HANDLING CH GENERATOR SITE AE

AE-T001

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 87
Number Projected: 3

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	101.0	101.0	101.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	216.3	168.3	259.6
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	17.4	17.4	m3
End of 1993:	18.0	18.0	m3
1994:	0.6	0.6	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.13E+00	Curies/m3
Am243	4.00E-02	Curies/m3
Np237	6.43E-03	Curies/m3
Pu238	4.07E-06	Curies/m3
Pu239	1.17E+00	Curies/m3
Pu241	6.10E-01	Curies/m3
U233	1.20E-09	Curies/m3
U235	2.50E-05	Curies/m3
U238	2.24E-05	Curies/m3

Comments

Hanford, WA site data includes ANL-E waste forecast data for years 1995 through 2022. ANL-E has included the requested data in its forecast to Hanford and reporting this data separately would result in double counting of waste volumes. ANL-E plans to ship this waste to Hanford provided projects are funded, Storage/Disposal Approval Requests are approved, estimated waste volumes are actually generated, regulations allow shipment, etc., during that time period.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **AE**

WASTE TYPE: TRU | HANDLING: CH | GENERATOR SITE: AE

WASTE STREAM	MWIR ID	
	WIPP ID	AE-T003
	Local ID	Not reported
MATRIX CODE		
SITE FINAL FORM IDC		

STREAM NAME:

DESCRIPTION: Non-mixed TRU derived from IDB.

Waste Matrix Code Group: Uncategorized Metal

Site Matrix Description:

NO MIGRATION VARIANCE PETITION ASSIGNMENT:

TRUCON CODE:

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

159

160

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **AE**

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** AE

AE-T003

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 24
Number Projected: 3

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	302.9	76.9	913.5
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4.4	4.4	m3
End of 1993:	5.0	5.0	m3
1994:	0.6	0.6	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.13E+00	Curies/m3
Am243	4.00E-02	Curies/m3
Np237	6.43E-03	Curies/m3
Pu238	4.07E-06	Curies/m3
Pu239	1.17E+00	Curies/m3
Pu241	6.10E-01	Curies/m3
U233	1.20E-09	Curies/m3
U235	2.50E-05	Curies/m3
U238	2.24E-05	Curies/m3

Comments

Hanford, WA site data includes ANL-E waste forecast data for years 1995 through 2022. ANL-E has included the requested data in its forecast to Hanford and reporting this data separately would result in double counting of waste volumes. ANL-E plans to ship this waste to Hanford provided projects are funded, Storage/Disposal Approval Requests are approved, estimated waste volumes are actually generated, regulations allow shipment, etc., during that time period.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AE

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** AE

WASTE STREAM MWIR ID	AE-W038	**STREAM NAME**	Aqueous Lab Packs
WIPP ID	AE-W038		
Local ID	Not reported	**DESCRIPTION**	MTRU Acidic Wastewater
MATRIX CODE	6120		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Solidified Inorganics		

Site Matrix Description: This waste stream comprises three waste sources: 1) Lab packs of acidic wastes from research and development projects site-wide, 2) Acidic wastewater from Chemical Technology (CMT) Division - Building 205, and 3) Acidic wastewater from the analysis of plutonium at the New Brunswick Laboratory (NBL).

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU		Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

160

162

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AE | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE AE

AE-W038 CONTAINER: Drum | Type/Size: 55-gallon | Container Matl: Steel | Int. Vol/Ctnr: 0.208 m3 | Liner Type: | Liner Material: | Number Stored: 23 | Number Projected: 3

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	101.0	101.0	101.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	216.3	168.3	259.6
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4.1	4.1	m3
End of 1993:	4.7	4.7	m3
1994:	0.6	0.6	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B

D004A

D006A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.13E+00	Curies/m3
Am243	4.00E-02	Curies/m3
Np237	6.43E-03	Curies/m3
Pu238	4.07E-06	Curies/m3
Pu239	1.17E+00	Curies/m3
Pu241	6.10E-01	Curies/m3
U233	1.20E-09	Curies/m3
U235	2.50E-05	Curies/m3
U238	2.24E-05	Curies/m3

Comments

Hanford, WA site data includes ANL-E waste forecast data for years 1995 through 2022. ANL-E has included the requested data in its forecast to Hanford and reporting this data separately would result in double counting of waste volumes. ANL-E plans to ship this waste to Hanford provided projects are funded, Storage/Disposal Approval Requests are approved, estimated waste volumes are actually generated, regulations allow shipment, etc., during that time period.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AE

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** AE

WASTE STREAM MWIR ID AE-W039

WIPP ID AE-W039

Local ID Not reported

STREAM NAME Organic Resins

DESCRIPTION MTRU Organic Resins

MATRIX CODE 3212

SITE FINAL FORM IDC

Waste Matrix Code Group: Solidified Organics

Site Matrix Description: Resins used in the radiochemical analysis.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU		Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

162

162

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AE

WASTE TYPE MTRU HANDLING CH GENERATOR SITE AE

AE-W039

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 0
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	351.0	28.8	548.1
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	346.2	101.0	726.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.025	0.025	m3
End of 1993:	0.025	0.025	m3
1994:	0.000	0.000	m3/yr
1995:	0.000	0.000	m3/yr
1996:	0.000	0.000	m3/yr
1997:	0.000	0.000	m3/ry
1998-2002:	0.000	0.000	m3/yr
2003-2022:	0.000	0.000	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.13E+00	Curies/m3
Am243	4.00E-02	Curies/m3
Np237	6.43E-03	Curies/m3
Pu238	4.07E-06	Curies/m3
Pu239	1.17E+00	Curies/m3
Pu241	6.10E-01	Curies/m3
U233	1.20E-09	Curies/m3
U235	2.50E-05	Curies/m3
U238	2.24E-05	Curies/m3

Comments

Hanford, WA site data includes ANL-E waste forecast data for years 1995 through 2022. ANL-E has included the requested data in its forecast to hanford and reporting this data separately would result in double counting of waste volumes. ANL-E plans to ship this waste to Hanford provided projects are funded, Storage/Disposal Approval Requests are approved, estimated waste volumes are actually generated, regulations allow shipment, etc., during that time period.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AE

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** AE

WASTE STREAM MWIR ID	AE-W040	**STREAM NAME**	Wastewater Treatment Sludges
WIPP ID	AE-W040	**DESCRIPTION**	MTRU Evaporator, Concentrator Sludges
Local ID	Not reported		
MATRIX CODE	3121		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Solidified Inorganics		
Site Matrix Description	MTRU sludge from evaporator used to concentrate aqueous liquids. Sludges may contain cadmium, chromium and/or mercury.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

164

165

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AE

WASTE TYPE MTRU HANDLING CH GENERATOR SITE AE

AE-W040

CONTAINER:	Drum	Container Matl:	Steel	Liner Type:		Number Stored:	2
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:		Number Projected:	0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	394.2	173.1	528.8
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	399.0	173.1	528.8
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.4	m3
End of 1993:	0.4	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.13E+00	Curies/m3
Am243	4.00E-02	Curies/m3
Np237	6.43E-03	Curies/m3
Pu238	4.07E-06	Curies/m3
Pu239	1.17E+00	Curies/m3
Pu241	6.10E-01	Curies/m3
U233	1.20E-09	Curies/m3
U235	2.50E-05	Curies/m3
U238	2.24E-05	Curies/m3

TYPICAL EPA CODES APPLICABLE

D006A

D007A

D009A

Comments

Hanford, WA site data includes ANL-E waste forecast data for years 1995 through 2022. ANL-E has included the requested data in its forecast to Hanford and reporting this data separately would result in double counting of waste volumes. ANL-E plans to ship this waste to Hanford provided projects are funded, Storage/Disposal Approval Requests are approved, estimated waste volumes are actually generated, regulations allow shipment, etc., during that time period.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AE

WASTE TYPE MTRU HANDLING CH GENERATOR SITE AE

WASTE STREAM MWIR ID	AE-W041
WIPP ID	AE-W041
Local ID	Not reported
MATRIX CODE	7210
SITE FINAL FORM IDC	
STREAM NAME	Non-Activated Lead
DESCRIPTION	MTRU Elemental Lead
Waste Matrix Code Group	Lead/Cadmium Metal Waste
Site Matrix Description	Lead bricks from Building 212 glove boxes. The lead bricks contain plutonium.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

166

167

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **AE** WASTE TYPE MTRU HANDLING CH GENERATOR SITE AE

AE-W041 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 3
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	302.9	76.9	913.5
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.7	0.7	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008C

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.13E+00	Curies/m3
Am243	4.00E-02	Curies/m3
Np237	6.43E-03	Curies/m3
Pu238	4.07E-06	Curies/m3
Pu239	1.17E+00	Curies/m3
Pu241	6.10E-01	Curies/m3
U233	1.20E-09	Curies/m3
U235	2.50E-05	Curies/m3
U238	2.24E-05	Curies/m3

Comments

Hanford, WA site data includes ANL-E waste forecast data for years 1995 through 2022. ANL-E has included the requested data in its forecast to Hanford and reporting this data separately would result in double counting of waste volumes. ANL-E plans to ship this waste to Hanford provided projects are funded, Storage/Disposal Approval Requests are approved, estimated waste volumes are actually generated, regulations allow shipment, etc., during that time period.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AE

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** AE

WASTE STREAM

MWIR ID	AE-W042
WIPP ID	AE-W042
Local ID	Not reported
MATRIX CODE	5130
SITE FINAL FORM IDC	

STREAM NAME Cadmium containing metal debris

DESCRIPTION MTRU Cadmium Waste

Waste Matrix Code Group Lead/Cadmium Metal Waste

Site Matrix Description Cadmium containing metal/salt waste from IFR research and development projects. The waste contains plutonium and uranium.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

168

169

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AE

WASTE TYPE MTRU HANDLING CH GENERATOR SITE AE

AE-W042

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Steel
Int. Vol/Ctnr: 0.222 m3

Liner Type:
Liner Material:

Number Stored: 2
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	256.1	256.1	256.1
Aluminum-Based Metals/Alloys	27.8	27.8	27.8
Other Metals	24.7	24.7	24.7
Other Inorganic Materials	29.3	2.3	29.3
Cellulosics	7.4	0.0	45.3
Rubber	0.0	0.0	0.0
Plastics	15.1	0.0	67.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.4	m3
End of 1993:	0.4	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.13E+00	Curies/m3
Am243	4.00E-02	Curies/m3
Np237	6.43E-03	Curies/m3
Pu238	4.07E-06	Curies/m3
Pu239	1.17E+00	Curies/m3
Pu241	6.10E-01	Curies/m3
U233	1.20E-09	Curies/m3
U235	2.50E-05	Curies/m3
U238	2.24E-05	Curies/m3

Comments

Hanford, WA site data includes ANL-E waste forecast data for years 1995 through 2022. ANL-E has included the requested data in its forecast to Hanford and reporting this data separately would result in double counting of waste volumes. ANL-E plans to ship this waste to Hanford provided projects are funded, Storage/Disposal Approval Requests are approved, estimated waste volumes are actually generated, regulations allow shipment, etc., during that time period.

Argonne National Laboratory – West

ARGONNE NATIONAL LABORATORY-WEST (AW) WASTE STREAM PROFILES

The following assumptions were made by the WTWBIR team in developing the AW waste stream profiles.

- An AW RH Canister (without any shielding) has been assumed for the 0.112 m^3 RH container.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW

WASTE TYPE MTRU HANDLING CH GENERATOR SITE AW

WASTE STREAM	MWIR ID		STREAM NAME: ALHC Upgrade Decon Debris
	WIPP ID	AW-M001	
	Local ID	CH-ANL-505T	DESCRIPTION
MATRIX CODE		5400	
SITE FINAL FORM IDC			

Waste Matrix Code Group: *Lead/Cadmium Metal Waste*

Site Matrix Description: Waste packaged for WIPP containing: radioactive cadmium debris from CH-ANL-242T, solidified to meet WIPP-WAC requirement for particulate immobilization, and bags of lead-lined gloves were placed in the solidified Co2 drums to fill the void space.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

172

172

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW

WASTE TYPE MTRU HANDLING CH GENERATOR SITE AW

AW-M001 CONTAINER: SWB
Type/Size:

Container Matl: Steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 0
Number Projected: 1

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	145.0	145.0	145.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	264.0	264.0	264.0
Rubber	0.0	0.0	0.0
Plastics	13.0	13.0	13.0
Solidified, Inorganic matrix	237.0	237.0	237.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	0.0		

Comments

Leaded gloves are 22% of volume
Mops are 40% of volume
Plastics are 2% of volume
Solidified process residues are 36% of volume

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	1.2	1.9	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D006
D007
D008

TYPICAL ISOTOPIC COMPOSITION

Nuclide Activity

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW

WASTE TYPE MTRU HANDLING CH GENERATOR SITE AW

WASTE STREAM
MWIR ID
WIPP ID AW-M002
Local ID CH-ANL-142T

MATRIX CODE 5311

SITE FINAL FORM IDC

STREAM NAME Lead/Cadmium Metal Waste

DESCRIPTION This waste is typically lead lined gloves replaced at the Experimental Fuel Laboratory Glove Box.

Waste Matrix Code Group: Lead/Cadmium Metal Waste

Site Matrix Description: This waste is typically lead lined gloves replaced at the Experimental Fuel Laboratory Glove Box.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU		Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

174

175

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW   WASTE TYPE MTRU   HANDLING CH   GENERATOR SITE AW

AW-M002

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: metal/steel
Int. Vol/Ctnr: 0.21 m3

Liner Type:
Liner Material:

Number Stored: 0
Number Projected: 3

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys			
Aluminum-Based Metals/Alloys			
Other Metals			
Other Inorganic Materials			
Cellulosics			
Rubber			
Plastics			
Solidified, Inorganic matrix			
Solidified, Organic matrix			
Soils			
Packaging Materials, Steel	131.0		
Packaging Material, Plastic			

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.00	0.00	m3
End of 1993:	0.02	0.02	m3
1994:	0.02	0.02	m3/yr
1995:	0.02	0.02	m3/yr
1996:	0.02	0.02	m3/yr
1997:	0.02	0.02	m3/ry
1998-2002:	0.02	0.02	m3/yr
2003-2022:	0.02	0.02	m3/yr

TYPICAL EPA CODES APPLICABLE

D008

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW

WASTE TYPE MTRU HANDLING RH GENERATOR SITE AW

WASTE STREAM MWIR ID		**STREAM NAME**	TRU waste used pre-filters
WIPP ID	AW-M003		
Local ID	CH-ANL-503T	**DESCRIPTION**	Spent Metal and Wood Prefilters. WTWBIR changes based on ANL-W volume estimate 1994 vol changed to 0 and added .91 to 1993.
MATRIX CODE	5410		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Filter		
Site Matrix Description	The waste consists of metal or wood framed pre-filters. Prefilters are 2' x 2' x .5'. HEPA filters are 2' x 2' x 1'. Both types of filters have screen mesh covering high efficiency filtering media. The concentrations of radioisotopes and RCRA toxic metals vary in each filter. These filters were generated from the decontamination of the analytical hot cell in 1993.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

176

177

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW

WASTE TYPE MTRU | HANDLING RH | GENERATOR SITE AW

AW-M003 CONTAINER: RH Canister
Type/Size: RH Cannister

Container Matl: Steel/Lead
Int. Vol/Ctnr: 0.89 m3

Liner Type:
Liner Material:

Number Stored: 1
Number Projected: 1

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	232.5	214.9	241.2
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	8.8	8.8	8.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	435.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.9	0.9	m3
1994:	0.1	0.1	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.1	0.1	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Footnotes

Includes 465 kg/m3 of lead shielding.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW

WASTE TYPE TRU HANDLING CH GENERATOR SITE AW

WASTE STREAM
MWIR ID
WIPP ID AW-T001
Local ID

MATRIX CODE
SITE FINAL FORM IDC

STREAM NAME ANL-W CH TRU Waste

DESCRIPTION CH-TRU waste generated by FCF pyroprocessing demonstration (not yet generated). Estimated 2 drums/year.

Waste Matrix Code Group: Heterogeneous
Site Matrix Description:

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	[ ]	Mixed TRU	[ ]	Rsearch and Devel. Waste	[ ]	TSCA	Asbestos	[ ]
Non-Defense TRU Waste	[X]	Non-Mixed TRU	[X]	Operations Waste	[X]		PCBs	[ ]
Commercial TRU Waste	[ ]	Suspect Mixed TRU	[ ]	Residues	[ ]		Other	[ ]
Unknown	[ ]	Unknown	[ ]	Decon and Decommissioning	[X]		N/A	[X]
				Environmental Restoration	[ ]		Unknown	[ ]
				From Treatment of Waste	[ ]			
				Maintenance	[ ]			

178

179

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW

WASTE TYPE TRU HANDLING CH GENERATOR SITE AW

AW-T001

CONTAINER: Drum
Type/Size: 55 gallon

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: 80 mil Liner HD
Liner Material: plastic

Number Stored: 0
Number Projected: 16

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.4	0.4	m3/yr
1996:	0.4	0.4	m3/yr
1997:	0.4	0.4	m3/ry
1998-2002:	0.4	0.4	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Composition is not yet known on future waste.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW

WASTE TYPE TRU | HANDLING RH | GENERATOR SITE AW

WASTE STREAM MWIR ID		**STREAM NAME**	Projected RH canisters.
WIPP ID	AW-T002		
Local ID		**DESCRIPTION**	RH-TRU waste generated from FCF pyroprocessing.
MATRIX CODE			
SITE FINAL FORM IDC			
Waste Matrix Code Group	Unknown		
Site Matrix Description			

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

180

182

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW

WASTE TYPE TRU HANDLING RH GENERATOR SITE AW

AW-T002 CONTAINER: ANL-W RH Canister
Type/Size: ANL-W RH Canister

Container Matl: Steel/Lead
Int. Vol/Ctnr: 0.112 m3

Liner Type:
Liner Material:

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.3	0.3	m3/yr
1997:	0.9	0.9	m3/ry
1998-2002:	0.9	0.9	m3/yr
2003-2022:	0.9	0.9	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

No constituent data provided.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW

WASTE TYPE MTRU **HANDLING** RH **GENERATOR SITE** AW

WASTE STREAM	**MWIR ID** AW-W016	**STREAM NAME**	Electrorefiner Stripped Cadmium
	WIPP ID AW-W016		
	Local ID CH-ANL-245T	**DESCRIPTION**	Electrorefiner Stripped Cadmium
MATRIX CODE	3190		
SITE FINAL FORM IDC			

Waste Matrix Code Group Lead/Cadmium Metal Waste

Site Matrix Description This waste stream consists of cadmium dispersed in a copper alloy matrix. This waste stream will be generated from the Electrorefiner station in the ANL-Fuel Cycle Facility.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

182

182

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW

WASTE TYPE MTRU HANDLING RH GENERATOR SITE AW

AW-W016 CONTAINER: ANL-W RH Canister
Type/Size: ANL-W RH Canister

Container Matl: Steel
Int. Vol/Ctnr: 0.112 m3

Liner Type:
Liner Material:

Number Stored: 0
Number Projected: 2

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	256.1	256.1	256.1
Aluminum-Based Metals/Alloys	27.8	27.8	27.8
Other Metals	24.7	24.7	24.7
Other Inorganic Materials	29.3	2.3	29.3
Cellulosics	7.4	0.0	45.3
Rubber	0.0	0.0	0.0
Plastics	15.1	0.0	67.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.00	0.00	m3
End of 1993:	0.00	0.00	m3
1994:	0.00	0.00	m3/yr
1995:	0.02	0.02	m3/yr
1996:	0.02	0.02	m3/yr
1997:	0.02	0.02	m3/ry
1998-2002:	0.04	0.04	m3/yr
2003-2022:	0.00	0.00	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW

WASTE TYPE MTRU **HANDLING** RH **GENERATOR SITE** AW

WASTE STREAM MWIR ID	AW-W018	**STREAM NAME**	Sodium - TRU
WIPP ID	AW-W018	**DESCRIPTION**	Sodium-TRU
Local ID	CH-ANL-180T		
MATRIX CODE	6200		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Uncategorized Metal		
Site Matrix Description	Sodium is used as a primary and secondary coolant for the EBR-II Reactor. Waste sodium metal is a hazardous constituent of the TRU waste stored at the *ANL-W Radioactive Scrap and Waste Facility (RSWF). Waste at RSWF is remote-handled.* This waste is generated during maintenance and operational activities. The sodium typically coats waste metal equipment, experiments and components removed during reactor operations and maintenance activities.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

181

186

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW

WASTE TYPE MTRU **HANDLING** RH **GENERATOR SITE** AW

AW-W018

CONTAINER: RH Canister
Type/Size: Steel

Container Matl: Steel
Int. Vol/Ctnr: 0.112 m3

Liner Type:
Liner Material:

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	256.1	256.1	256.1
Aluminum-Based Metals/Alloys	27.8	27.8	27.8
Other Metals	24.7	24.7	24.7
Other Inorganic Materials	29.3	2.3	29.3
Cellulosics	7.4	0.0	45.3
Rubber	0.0	0.0	0.0
Plastics	15.1	0.0	67.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	7.1	7.1	m3
1994:	0.2	0.2	m3/yr
1995:	0.2	0.2	m3/yr
1996:	0.2	0.2	m3/yr
1997:	0.2	0.2	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

TYPICAL EPA CODES APPLICABLE

D001C

D003D

Comments

CH-ANL-180T will be treated to remove sodium contamination from waste to meet the WIPP WAC (no reactives). The final waste form to be sent to WIPP will be metal TRU waste material (no sodium contamination).

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW

WASTE TYPE MTRU HANDLING RH GENERATOR SITE AW

WASTE STREAM	MWIR ID	AW-W019
	WIPP ID	AW-W019
	Local ID	CH-ANL-182T
MATRIX CODE		6200
SITE FINAL FORM IDC		

STREAM NAME Sodium Potassium-(NaK) - TRU

DESCRIPTION Sodium Potassium - NaK - TRU

Waste Matrix Code Group: Uncategorized Metal

Site Matrix Description: Sodium potassium alloy (NaK) is used as a coolant for some components of the EBR-II reactor. Waste NaK metal is a hazardous constituent of some transuranic wastes stored at the ANL-W Radioactive Scrap and Waste Facility (RSWF). The remote-handled NaK waste at RSWF is contained in stainless steel capsules or tubing and placed inside carbon steel waste cans which are then placed in stainless steel outer cans. The entire package is then stored in RSWF storage liners (carbon steel soil storage vaults). The NaK is generated during maintenance and operational activities. NaK waste is in canisters with TRU waste metal pieces and rods from reactor experiments.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	[ ]	Mixed TRU	[X]	Rsearch and Devel. Waste	[ ]	TSCA Asbestos	[ ]
Non-Defense TRU Waste	[X]	Non-Mixed TRU	[ ]	Operations Waste	[X]	PCBs	[ ]
Commercial TRU Waste	[ ]	Suspect Mixed TRU	[ ]	Residues	[ ]	Other	[ ]
Unknown	[ ]	Unknown	[ ]	Decon and Decommissioning	[ ]	N/A	[X]
				Environmental Restoration	[ ]	Unknown	[ ]
				From Treatment of Waste	[ ]		
				Maintenance	[X]		

186

187

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW

WASTE TYPE MTRU HANDLING RH GENERATOR SITE AW

AW-W019 CONTAINER: ANL-W RH Canister
Type/Size: ANL-W RH Canister

Container Matl: Steel/lead
Int. Vol/Ctnr: 0.112 m3

Liner Type: Metal insert
Liner Material: Carbon steel

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	256.1	256.1	256.1
Aluminum-Based Metals/Alloys	27.8	27.8	27.8
Other Metals	24.7	24.7	24.7
Other Inorganic Materials	29.3	2.3	29.3
Cellulosics	7.4	0.0	45.3
Rubber	0.0	0.0	0.0
Plastics	15.1	0.0	57.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.112	0.112	m3
End of 1993:	0.112	0.112	m3
1994:	0.000	0.000	m3/yr
1995:	0.000	0.000	m3/yr
1996:	0.000	0.000	m3/yr
1997:	0.000	0.000	m3/ry
1998-2002:	0.000	0.000	m3/yr
2003-2022:	0.000	0.000	m3/yr

TYPICAL EPA CODES APPLICABLE

D001C

D003D

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW | **WASTE TYPE** MTRU | **HANDLING** RH | **GENERATOR SITE** AW

WASTE STREAM	MWIR ID	AW-W020
	WIPP ID	AW-W020
	Local ID	CH-ANL-241T
MATRIX CODE		5400
SITE FINAL FORM IDC		

STREAM NAME TRU-CD-Hot Cell Waste

DESCRIPTION TRU-CD-Hot Cell Waste

Waste Matrix Code Group Heterogeneous

Site Matrix Description This waste stream consists of metallic cadiumum, soils, and associated cleanup materials (paper towels and cloth rags). The waste is contaminated with activation and fission products as well as with plutonium. This waste stream is generated for Fuel Cycle Facility demonstration support experiments.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU		Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

189

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW | WASTE TYPE MTRU | HANDLING RH | GENERATOR SITE AW

AW-W020

CONTAINER:	ANL-W RH Canister	Container Matl:	Steel/lead	Liner Type:	
Type/Size:	ANL-W RH Canister	Int. Vol/Ctnr:	0.112 m3	Liner Material:	

Number Stored: 5
Number Projected: 1

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.000	0.200	m3
End of 1993:	0.590	0.590	m3
1994:	0.010	0.010	m3/yr
1995:	0.010	0.010	m3/yr
1996:	0.010	0.010	m3/yr
1997:	0.010	0.010	m3/ry
1998-2002:	0.008	0.008	m3/yr
2003-2022:	0.000	0.000	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

190

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW

WASTE TYPE MTRU **HANDLING** RH **GENERATOR SITE** AW

WASTE STREAM

MWIR ID	AW-W021
WIPP ID	AW-W021
Local ID	CH-ANL-243T
MATRIX CODE	5100
SITE FINAL FORM IDC	
STREAM NAME	Metal Debris
DESCRIPTION	ELEMENT HARDWARE FCF WASTE
Waste Matrix Code Group	Uncategorized Metal
Site Matrix Description	This waste stream consists of metal, and of EER N fuel elements. This waste stream will be generated from the "Element Chopper" station in the ANL-W Fuel Cycle Facility demonstration.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

191

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW **WASTE TYPE** MTRU **HANDLING** RH **GENERATOR SITE** AW

AW-W021 **CONTAINER:** ANL-W RH Canister **Type/Size:** ANL-W RH Cannister

Container Matl: Steel **Int. Vol/Ctnr:** 0.112 m3

Liner Type: **Liner Material:**

Number Stored: 0 **Number Projected:** 7

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	256.1	256.1	256.1
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	7.4	0.0	45.3
Rubber	0.0	0.0	0.0
Plastics	15.1	0.0	67.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.000	0.600	m3
End of 1993:	0.000	0.000	m3
1994:	0.000	0.000	m3/yr
1995:	0.150	0.150	m3/yr
1996:	0.150	0.150	m3/yr
1997:	0.150	0.150	m3/ry
1998-2002:	0.006	0.006	m3/yr
2003-2022:	0.000	0.000	m3/yr

TYPICAL EPA CODES APPLICABLE

D005A

D006A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW

WASTE TYPE MTRU **HANDLING** RH **GENERATOR SITE** AW

WASTE STREAM

MWIR ID AW-W022

WIPP ID AW-W022

Local ID CH-ANL-246T

MATRIX CODE 3150

SITE FINAL FORM IDC

STREAM NAME Electro Refiner Insoluables w/Cadmium

DESCRIPTION Electro Refiner Insoluables w/Cadmium

Waste Matrix Code Group Lead/Cadmium Metal Waste

Site Matrix Description This waste stream consists of cadmium metal with other heavy metals and "mable" metals (that is, they are not reactive in the FCF electrorefining process). This waste stream will be generated from the electrorefiner station in the ANL-W Fuel Cycle Facility Integral Fast Reactor demonstration. This waste stream includes inorganic sludges/particulates.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

192

193

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME AW | WASTE TYPE MTRU | HANDLING RH | GENERATOR SITE AW

AW-W022 | CONTAINER: ANL-W RH Canister | Type/Size: ANL-W RH Canister | Container Matl: Steel/Lead | Int. Vol/Ctnr: 0.112 m3 | Liner Type: | Liner Material: | Number Stored: 0 | Number Projected: 1

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	489.0	28.8	754.8
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	206.9	101.0	619.2
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.000	0.072	m3
End of 1993:	0.000	0.000	m3
1994:	0.000	0.000	m3/yr
1995:	0.020	0.020	m3/yr
1996:	0.020	0.020	m3/yr
1997:	0.020	0.020	m3/ry
1998-2002:	0.008	0.008	m3/yr
2003-2022:	0.000	0.000	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Battelle Columbus Laboratories

BATTELLE COLUMBUS LABORATORY (BC) WASTE STREAM PROFILES

The following modifications were made by the WTWBIR team in developing the BC waste stream profiles:

- BC Final Waste Form Groups were modified to be consistent with the nomenclature used in the WTWBID. These changes included word and spelling changes. The assigned Final Waste Form Groups are consistent with the information provided by BC.
- The WTWBIR ID "RHTRU" submitted by BC was changed to BC-T001 to be consistent with the ID's used in the WTWBIR database.
- The containers for RH-TRU waste streams were reported as drums by the site. The drums were changed to RH canisters, with three drums overpacked in each canister.
- The volumes for the years 1998-2002 were reported by the site as total volumes for each five-year period. The WTWBIR team converted the values to volume/year.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME BC

WASTE TYPE TRU HANDLING RH GENERATOR SITE BC

WASTE STREAM MWIR ID	
WIPP ID	BC-T001
Local ID	RHTRU
MATRIX CODE	5400
SITE FINAL FORM IDC	
STREAM NAME	RH/TRU RUBBLE/DEBRIS
DESCRIPTION	RUBBLE/DEBRIS WITH TRU
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	Heterogeneous Debris

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

96

197

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **BC** WASTE TYPE TRU HANDLING RH GENERATOR SITE BC

BC-T001 CONTAINER: RH Canister
Type/Size:
Container Matl: steel/lead
Int. Vol/Ctnr: 0.89 m3
Liner Type:
Liner Material:
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	2000.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	527.0		
Packaging Material, Plastic	26.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	14.2	14.2	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Kr85	6.00E-02	Curies/m3
Sr90	3.50E-01	Curies/m3
Zr95	3.00E+00	Curies/m3
Nb95	4.70E+00	Curies/m3
Ru106	4.80E+00	Curies/m3
I129	2.40E-07	Curies/m3
Cs134	5.80E-01	Curies/m3
Cs137	6.20E-01	Curies/m3
Ce144	4.70E+00	Curies/m3
Co60	3.00E+01	Curies/m3
U235	2.40E-07	Curies/m3
U238	1.70E-05	Curies/m3
Pu238	2.90E-03	Curies/m3
Pu239	3.70E-04	Curies/m3
Pu240	4.80E-04	Curies/m3
Pu241	1.40E-01	Curies/m3

Comments

BC has no mixed TRU waste.

Footnotes

Includes 465 kg/m3 in lead shielding.

Bettis Atomic Power Laboratory

198

BETTIS ATOMIC POWER LABORATORY (BT) WASTE STREAM PROFILES

The following assumptions/modifications were made by the WTWBIR team in developing the BT waste stream profiles:

- *The two digit site identification code used in the MWIR (BT) has been substituted for "BE."*

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME BT

WASTE TYPE TRU **HANDLING** RH **GENERATOR SITE** BT

WASTE STREAM
MWIR ID:
WIPP ID: BT-T001
Local ID: BT-T001

STREAM NAME Irradiated TRU material waste

DESCRIPTION Specimen processing fines, material, and debris resulting from operations involving destructive evaluations of irradiated fuel specimens.

MATRIX CODE

SITE FINAL FORM IDC

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Refer to "description" above

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

202

202

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **BT** WASTE TYPE TRU HANDLING RH GENERATOR SITE BT

BT-T001

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: Steel
Int. Vol/Ctnr: 0.261 m3
Liner Type: n/a
Liner Material:
Number Stored: 0
Number Projected: 7

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	425.0	350.0	500.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	10.0	0.0	20.0
Rubber	0.0	0.0	0.0
Plastics	450.0	350.0	550.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	875.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.3	0.3	m3/yr
1996:	0.2	0.2	m3/yr
1997:	0.3	0.3	m3/ry
1998-2002:	0.1	0.1	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Ba137m	1.00E+03	Curies/m3
Cs137	1.05E+03	Curies/m3
Y90	1.05E+03	Curies/m3
Sr90	1.05E+03	Curies/m3
Co60	5.00E+01	Curies/m3
Cs134	5.00E+01	Curies/m3
Eu154	5.00E+01	Curies/m3
Fe55	5.00E+01	Curies/m3
Kr85	5.00E+01	Curies/m3
Ni63	1.50E+02	Curies/m3
Pm147	3.50E+02	Curies/m3
Eu152	5.00E+01	Curies/m3
Pu238	5.00E+01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **BT**

WASTE TYPE TRU HANDLING CH GENERATOR SITE BT

WASTE STREAM

MWIR ID	
WIPP ID	BT-T002
Local ID	BT-T002
MATRIX CODE	
SITE FINAL FORM IDC	

STREAM NAME Contaminated Piping System

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

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Refer to "description" above.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

202

203

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME BT

WASTE TYPE TRU HANDLING CH GENERATOR SITE BT

BT-T002 CONTAINER: Standard Waste Box
Type/Size:

Container Matl: Steel
Int. Vol/Ctnr: 1.89 m3

Liner Type: N/A
Liner Material:

Number Stored: 0
Number Projected: 8

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	430.0	340.0	500.0
Aluminum-Based Metals/Alloys	35.0	28.0	40.0
Other Metals	1.0	0.0	10.0
Other Inorganic Materials	1.0	0.0	5.0
Cellulosics	0.0	0.0	1.0
Rubber	7.0	6.0	10.0
Plastics	35.0	30.0	40.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	1.0	0.0	10.0
Packaging Materials, Steel	208.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	2.3	2.3	m3/yr
2003-2022:	0.2	0.2	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Ba137m	1.10E+00	Curies/m3
Cs137	1.10E+00	Curies/m3
Y90	1.10E+00	Curies/m3
Sr90	1.10E+00	Curies/m3
Co60	1.00E-01	Curies/m3
Cs134	1.00E-01	Curies/m3
Eu154	1.00E-01	Curies/m3
Fe55	1.00E-01	Curies/m3
Kr85	1.00E-01	Curies/m3
Ni63	2.00E-01	Curies/m3
Pm147	4.00E-01	Curies/m3
Eu152	1.00E-01	Curies/m3
Pu238	1.00E-01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **BT**

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE BT

WASTE STREAM MWIR ID	
WIPP ID	BT-T003
Local ID	BT-T003
MATRIX CODE	
SITE FINAL FORM IDC	
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	Refer to "description" above.

STREAM NAME Unirradiated Alpha Contaminated Waste

DESCRIPTION Steel gloveboxes, ceramic and steel furnaces, steel presses, steel grinding machines, steel ventilation ducts, and HEPA filters.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

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206

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **BT**

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE BT

BT-T003

CONTAINER: Type/Size: Standard Waste Box

Container Matl: Steel

Int. Vol/Ctnr: 1.89 m3

Liner Type: N/A

Liner Material:

Number Stored: 0

Number Projected: 57

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	285.0	200.0	700.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	16.0	11.0	40.0
Cellulosics	8.0	5.0	20.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	8.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	26.6	26.6	m3/yr
1997:	17.1	17.1	m3/ry
1998-2002:	12.9	12.9	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
U232	2.00E-03	Curies/m3
U233	9.70E-02	Curies/m3
Th228	2.00E-03	Curies/m3
Ra224	2.00E-03	Curies/m3
Rn220	2.00E-03	Curies/m3
Po216	2.00E-03	Curies/m3
Pb212	2.00E-03	Curies/m3
Bi212	2.00E-03	Curies/m3
Po212	2.00E-03	Curies/m3

206

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME BT

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** BT

WASTE STREAM

MWIR ID	
WIPP ID	BT-T004
Local ID	BT-T004
MATRIX CODE	
SITE FINAL FORM IDC	

STREAM NAME Source

DESCRIPTION Americium-243 Source

Waste Matrix Code Group Heterogeneous

Site Matrix Description Refer to "description" above.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		*Decon and Decommissioning*		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

207

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **BT**

WASTE TYPE TRU HANDLING CH GENERATOR SITE BT

BT-T004

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: N/A
Liner Material:

Number Stored: 0
Number Projected: 1

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	4.8	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	500.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.00000	0.00000	m3
End of 1993:	0.00000	0.00000	m3
1994:	0.00000	0.00000	m3/yr
1995:	0.00025	0.20800	m3/yr
1996:	0.00000	0.00000	m3/yr
1997:	0.00000	0.00000	m3/ry
1998-2002:	0.00000	0.00000	m3/yr
2003-2022:	0.00000	0.00000	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am243	3.20E+00	Curies/m3
Np239	3.20E+00	Curies/m3

Comments

Single source with packaging material. Lower and upper limits not applicable.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **BT**

WASTE TYPE TRU HANDLING CH GENERATOR SITE BT

WASTE STREAM MWIR ID	
WIPP ID	BT-T005
Local ID	BT-T005
MATRIX CODE	
SITE FINAL FORM IDC	
STREAM NAME	Source
DESCRIPTION	Californium-252 Source
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	Refer to "description" above.
NO MIGRATION VARIANCE PETITION ASSIGNMENT	
TRUCON CODE	

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

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209

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME BT

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** BT

BT-T005 **CONTAINER:** Drum **Type/Size:** 55-gallon

Container Matl: Steel **Int. Vol/Ctnr:** 0.261 m3

Liner Type: N/A **Liner Material:**

Number Stored: 0 **Number Projected:** 1

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	15.4	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	500.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0000000	0.0000000	m3
End of 1993:	0.0000000	0.0000000	m3
1994:	0.0000000	0.0000000	m3/yr
1995:	0.0000036	0.2080000	m3/yr
1996:	0.0000000	0.0000000	m3/yr
1997:	0.0000000	0.0000000	m3/ry
1998-2002:	0.0000000	0.0000000	m3/yr
2003-2022:	0.0000000	0.0000000	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Cf249	3.50E-01	Curies/m3
Cf250	5.60E+00	Curies/m3
Cf251	9.00E-02	Curies/m3
Cf252	1.00E+00	Curies/m3
Cm246	4.30E-02	Curies/m3
MFP	6.30E-01	Curies/m3

Comments

Single source with packaging material. Lower and upper limits not applicable.

Energy Technology Engineering Center

ENERGY TECHNOLOGY ENGINEERING CENTER (ET) WASTE STREAM PROFILES

The following assumptions/modifications were made by the WTWBIR team in developing the ET waste stream profiles:

- Final Waste Form Groups were not provided by ET. In order to permit roll-ups of the data, the WTWBIR team assigned Final Waste Form Groups based on the descriptions and parameters provided by ET.
- The WTWBIR team had to assign identification numbers (IDs) to those ET waste streams not given an identifier by the site.
- Since only current volumes were provided by ET, the final form volumes were assumed to be the same as the current volumes.
- The volumes for the year 1993 were changed from an annual rate of generation (m^3/year) to a cumulative value (m^3).

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME ET

WASTE TYPE MTRU HANDLING CH GENERATOR SITE ET

WASTE STREAM MWIR ID	
WIPP ID	ET-M001
Local ID	
MATRIX CODE	
SITE FINAL FORM IDC	
Waste Matrix Code Group	Lead/Cadmium Metal Waste
Site Matrix Description	
STREAM NAME	Hot Lab & PU Facility D&D
DESCRIPTION	1 lead shielding brick plus additional hot material.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

213

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME ET | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE ET

ET-M001 CONTAINER: Drum | Type/Size: 55-gallon | Container Matl: steel-galv. | Int. Vol/Ctnr: 0.21 m3 | Liner Type: rigid | Liner Material: HDPE-90 mil | Number Stored: 1 | Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	185.0	185.0	185.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	168.0		
Packaging Material, Plastic	34.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.21	0.21	m3
End of 1993:	0.21	0.21	m3
1994:	0.00	0.00	m3/yr
1995:	0.00	0.00	m3/yr
1996:	0.00	0.00	m3/yr
1997:	0.00	0.00	m3/ry
1998-2002:	0.00	0.00	m3/yr
2003-2022:	0.00	0.00	m3/yr

TYPICAL EPA CODES APPLICABLE

D008

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	4.60E-01	Curies/m3
Pu239	7.60E+00	Curies/m3
Pu240	2.60E+00	Curies/m3
Pu242	1.50E-04	Curies/m3
Am241	1.90E+00	Curies/m3
Pu241	3.50E+01	Curies/m3
Cs137	1.10E+00	Curies/m3
Sr90	1.00E+00	Curies/m3

Comments

Other metals - lead.

Footnotes

Have assumed D008 EPA code due to the presence of lead.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME ET

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** ET

WASTE STREAM

MWIR ID	
WIPP ID	ET-T001
Local ID	
MATRIX CODE	
SITE FINAL FORM IDC	
STREAM NAME	Hot Lab & PU Facility D&D
DESCRIPTION	Wastes generated from the clean-up of the Plutonium Facility (Bldg 55) and the Hot Lab (Bldg 20).
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

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216

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME ET

WASTE TYPE TRU HANDLING CH GENERATOR SITE ET

ET-T001

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.21 m3

Liner Type: rigid
Liner Material: concrete

Number Stored: 0
Number Projected: 25

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	126.0	120.0	130.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	2040.0	2000.0	2100.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	28.0	10.0	60.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	168.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	5.2	5.2	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide Activity

Comments

Iron-based metal - 8" dia. pipe which forms the concrete annulus.
Other inorganic materials - concrete liners (shielding).
Solidified, inorganic matrix - Debris from drain line.
Typical isotopic composition is unknown for this container.
Packaging Materials, Steel - Based on 35 kg/drum
Drums are for internal transfer and storage only. Although there is no plastic liner, R/A material is placed in one-gallon cans or plastic bags before placine in the concrete-lined drums

Would be "RH" without concrete liner.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME ET

WASTE TYPE TRU HANDLING CH GENERATOR SITE ET

ET-T001

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel - galv.
Int. Vol/Ctnr: 0.21 m3

Liner Type: rigid
Liner Material: HDPE-90 mil.

Number Stored: 8
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	144.0	70.0	300.0
Other Inorganic Materials	11.0	5.0	30.0
Cellulosics	16.0	8.0	30.0
Rubber	16.0	8.0	30.0
Plastics	113.0	50.0	250.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	204.0	100.0	400.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	168.0		
Packaging Material, Plastic	34.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.7	1.7	m3
End of 1993:	1.7	1.7	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.00E-02	Curies/m3
Pu239	1.10E-01	Curies/m3
Pu240	4.10E-02	Curies/m3
Pu242	4.80E-06	Curies/m3
Am241	3.40E-02	Curies/m3
Pu241	7.10E-01	Curies/m3
Cs137	1.20E-01	Curies/m3
Cr90	1.20E-01	Curies/m3

Comments

Other metals - unknown if iron- or aluminum-based.
Other inorganic materials - vermiculite.
Cellulosics - wood, paper.
Solidified, organic matrix - solidified oil
Packaging Materials, Steel - Based on 35 kg/drum

Idaho National Engineering Laboratory

217

IDAHO NATIONAL ENGINEERING LABORATORY (IN) WASTE STREAM PROFILE METHODOLOGY

The approach used and the assumptions made in preparing the IN waste stream profiles are as follows:

- WTWBIR, Revision 0 waste stream profile data was reviewed and updated by IN to generate Revision 1 WTWBIR data. The primary sources used for the IN review were data from the Idaho Mixed Waste Information (IMWI) system and the IN Draft Site Treatment Plan (DSTP), (Ref. 5). Other sources of information included the Radiological, Physical, and Chemical Characterization of Transuranic Wastes Stored at the IN Report (Ref. 4), the TRU Waste Sampling Program (TWSP) Report (Ref. 1), the Content Code Assessments (Ref. 2), and the Exploratory Research and Development Program (ERDP) 2802 Report (Ref. 3).
- The IMWI contains container level data on all waste stored at the IN. Although the IMWI was initially designed to inventory mixed waste, non-mixed waste is also inventoried in this system. The DSTP database is derived from the data stored in the IMWI and provides determinations and assumptions of the treatment plans and options for proper waste management. The Characterization Report (Ref. 4) contains detailed composition information on each waste stream; most of this information was also derived from the IMWI.
- To determine volume and radionuclide inventory information for Revision 1 WTWBIR, IN corrected and updated the Revision 0 WTWBIR data, as needed, through manipulation and calculation of data existing in the IMWI. This consisted of calculating the volume of waste that will be available for direct shipping to WIPP, the volume of waste that will require repackaging prior to shipment, the volume resulting from treatment of waste prior to shipment to WIPP, and the average curie concentration of all contained radionuclides for each waste stream. Presently, the WTWBIR waste stream profiles sum the volumes for direct ship waste and repackaged waste to report as one volume. All calculations were made on a waste volume basis, as the method used in the IMWI and the DSTP, then converted into container counts where appropriate.
- All treated waste is grouped into a new vitrified final form waste stream number IN-M07. Volumes for wastes after vitrification are reported in this waste stream. Curie concentrations for this waste stream are weighted average of all wastes that are treated and included in the final waste form volume.
- Material parameter data entries in the "Typical Material Weights for Final Waste Form" of the waste stream profiles were determined using information from past waste examination programs and knowledge gained in the WIPP Experimental Test Program. This consisted of reviewing past and current visual waste characterization activities and determining average, maximum, and minimum concentrations of waste constituent parameters, where possible. The majority of the data can be traced back to the TRU Waste Sampling Program (TWSP) Report (Ref. 1), the Content Code Assessments (Ref. 2), or the Characterization Report (Ref. 4). Waste volumes used to correct Revision 0 WTWBIR parameter densities were based on the Exploratory Research and Development Program (ERDP) 2802 report (Ref. 3), which includes data obtained from the TRU Waste Management Information System (TWMIS) in 1990. The Characterization Report and IN Draft Site Treatment Plan were also used to determine the typical material weights reported on the waste stream profile sheets, when information from the above sources were inadequate.

**IDAHO NATIONAL ENGINEERING LABORATORY (IN)
WASTE STREAM PROFILE METHODOLOGY (continued)**

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1. Clements, T. L., Jr. and D. E. Kudera, TRU Waste Sampling Program: Volume I--Waste Characterization, EGG-W-6503, September, 1985

2. Clements, T. L. Jr., Content Code Assessments for IN Contact-Handled Stored Transuranic Wastes, WM-F1-82-021, October 1982.

3. Edinborough, C. R., Processing Criteria for TRU Removal From RWMC Stored Waste, ERDP 2802 Final Report, CRE-03-90, August, 1990.

4. Apel, M. L. ct. al., Radiological, Physical, and Chemical Characterization of Transuranic Wastes Stored at the Idaho National Engineering Laboratory, EGG-RWMC-11109, March, 1994.

5. DOE, 1994, Idaho National Engineering Laboratory Draft Site Treatment Plan, DOE/ID-10453, U.S.D.O.E., August 1994.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING RH GENERATOR SITE AW

WASTE STREAM MWIR ID	
WIPP ID	IN-M001
Local ID	CH-ANL-218T
MATRIX CODE	
SITE FINAL FORM IDC	
Waste Matrix Code Group	Salt Waste
Site Matrix Description	
STREAM NAME	Electrorefiner Stripped Salts - Ba & Cd
DESCRIPTION	Chloride salts containing residual amounts of Cd and Ba.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

228

222

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING RH GENERATOR SITE AW

IN-M001

CONTAINER: Drum
Type/Size: 55-gallon

Container Mat'l: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 0
Number Projected: 13

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.1	m3/yr
1996:	0.0	0.1	m3/yr
1997:	0.0	0.1	m3/ry
1998-2002:	0.0	0.1	m3/yr
2003-2022:	0.0	0.1	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Ba137		Curies/m3
Cs134		Curies/m3
Cs137		Curies/m3
I129		Curies/m3
Sr90		Curies/m3
Y90		Curies/m3

Comments

Estimate generation of approximately 0.1 m3/yr.

Activity for these radionuclides is unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** RH **GENERATOR SITE** AW

WASTE STREAM MWIR ID		**STREAM NAME**	TRU-CD-Hot Cell Waste
WIPP ID	IN-M002		
Local ID	CH-ANL-241T	**DESCRIPTION**	Metallic Cadmium, Salts, and cleanup material such as paper towels and rags.
MATRIX CODE			
SITE FINAL FORM IDC			
Waste Matrix Code Group	Heterogeneous		
Site Matrix Description			

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

223

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING RH GENERATOR SITE AW

IN-M002

CONTAINER: Drum
Type/Size: 55-gallon

Container Mat'l: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 3
Number Projected: 13

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.624	0.624	m3
End of 1993:	0.624	0.624	m3
1994:	0.000	0.000	m3/yr
1995:	0.100	0.100	m3/yr
1996:	0.100	0.100	m3/yr
1997:	0.100	0.100	m3/ry
1998-2002:	0.100	0.100	m3/yr
2003-2022:	0.100	0.100	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Co60		Curies/m3
Cs134		Curies/m3
Cs137		Curies/m3
Mn54		Curies/m3
Pu239		Curies/m3
Ru106		Curies/m3
U235		Curies/m3

Comments

Future generation estimated as less than 0-1 m3/yr.

Activity for these radionuclides is unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** RH **GENERATOR SITE** AW

WASTE STREAM

MWIR ID	
WIPP ID	IN-M003
Local ID	CH-ANL-243T
MATRIX CODE	
SITE FINAL FORM IDC	
Waste Matrix Code Group	Uncategorized Metal
Site Matrix Description	

STREAM NAME Element Hardware FCF Waste

DESCRIPTION Small pieces of stainless steel from nuclear fuel.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X
Non-Defense TRU Waste	
Commercial TRU Waste	
Unknown	

Mixed TRU	X
Non-Mixed TRU	
Suspect Mixed TRU	
Unknown	

Rsearch and Devel. Waste	X
Operations Waste	
Residues	
Decon and Decommissioning	
Environmental Restoration	
From Treatment of Waste	
Maintenance	

TSCA		
	Asbestos	
	PCBs	
	Other	
	N/A	X
	Unknown	

224

225

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING RH GENERATOR SITE AW

IN-M003 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 0
Number Projected: 27

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.2	m3/yr
1996:	0.0	0.2	m3/yr
1997:	0.0	0.2	m3/ry
1998-2002:	0.0	0.2	m3/yr
2003-2022:	0.0	0.2	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Ba137		Curies/m3
Ce144		Curies/m3
Co58		Curies/m3
Co60		Curies/m3
Cr51		Curies/m3
Cs137		Curies/m3
Fe59		Curies/m3
I129		Curies/m3
Mn54		Curies/m3
Mo93		Curies/m3
Nb95		Curies/m3
Ni63		Curies/m3
Pr144		Curies/m3
Pu239		Curies/m3
Pu240		Curies/m3
Sr90		Curies/m3
Y90		Curies/m3
Zr95		Curies/m3

Comments

Future generation estimated to be less than 0.2 m3/yr.

Activity for these radionuclides is unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** RH **GENERATOR SITE** AW

WASTE STREAM	MWIR ID		
	WIPP ID	IN-M004	
	Local ID	CH-ANL-245T	
MATRIX CODE			
SITE FINAL FORM IDC			

STREAM NAME Electrorefiner Stripped Cadmium

DESCRIPTION Encapsulated waste cadmium metal.

Waste Matrix Code Group: Lead/Cadmium Metal Waste

Site Matrix Description:

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

226

228

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING RH GENERATOR SITE AW

IN-M004 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 0
Number Projected: 13

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.1	0.1	m3/yr
1996:	0.1	0.1	m3/yr
1997:	0.1	0.1	m3/ry
1998-2002:	0.1	0.1	m3/yr
2003-2022:	0.1	0.1	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Ce144		Curies/m3
Eu155		Curies/m3
Pm147		Curies/m3
Pr144		Curies/m3
Sm151		Curies/m3
Y91		Curies/m3

Comments

Future generation estimated to be less than 0-1 m3/yr.

Activity for these radionuclides is unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** RH **GENERATOR SITE** AW

WASTE STREAM MWIR ID		**STREAM NAME**	Electrorefiner Insolubles w/Cadmium
WIPP ID	IN-M005		
Local ID	CH-ANL-246T	**DESCRIPTION**	Cadmium and other heavy metals
MATRIX CODE			
SITE FINAL FORM IDC			
Waste Matrix Code Group	Lead/Cadmium Metal Waste		
Site Matrix Description			

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

229

229

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING RH GENERATOR SITE AW

IN-M005

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 0
Number Projected: 13

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.1	0.1	m3/yr
1996:	0.1	0.1	m3/yr
1997:	0.1	0.1	m3/ry
1998-2002:	0.1	0.1	m3/yr
2003-2022:	0.1	0.1	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
C14		Curies/m3
Cd113		Curies/m3
Nb95		Curies/m3
Rh106		Curies/m3
Ru106		Curies/m3
Sb125		Curies/m3
Sn123		Curies/m3
Tc99		Curies/m3
Te125		Curies/m3
Zr95		Curies/m3

Comments

Future generation estimated to be less than 0-1 m3/yr.

Activity for these radionuclides is unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING CH GENERATOR SITE IN

WASTE STREAM MWIR ID		STREAM NAME	Vitrified
WIPP ID	IN-T001	DESCRIPTION	Waste streams that will be treated to meet current WIPP Waste Acceptance Criteria.
Local ID	IN-T001		
MATRIX CODE			
SITE FINAL FORM IDC			
Waste Matrix Code Group	Solidified Inorganics		
Site Matrix Description			

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste	X			
				Maintenance				

280

231

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING CH GENERATOR SITE IN

IN-T001 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	14075.0	6748.0	m3
End of 1993:	14075.0	6748.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	3.14E+00	Curies/m3
Np237	1.77E-06	Curies/m3
Pu238	8.38E-01	Curies/m3
Pu239	1.51E-01	Curies/m3
Pu240	1.89E-02	Curies/m3
Pu242	2.29E-07	Curies/m3
Pu52	1.39E+01	Curies/m3
Pu83	1.58E-03	Curies/m3
U235	8.22E-07	Curies/m3
U238	3.26E-08	Curies/m3

Comments

This waste is the vitrified waste resulting from treatment of all waste forms. It will likely be TRU waste only.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** RH **GENERATOR SITE** IN

WASTE STREAM MWIR ID IN-W139
WIPP ID IN-W139
Local ID ID-EGG-142T

STREAM NAME Transuranic Contaminated Lead Debris

DESCRIPTION

MATRIX CODE

SITE FINAL FORM IDC

Waste Matrix Code Group Heterogeneous

Site Matrix Description This waste is lead contaminated lead debris from various sources. This debris includes lead pieces, galvanized sheet metal, copper/bronzeware, silicon, impregnated fiberglass, paper, HEPA filters, duct, etc.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

232

233

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING RH GENERATOR SITE IN

IN-W139

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 25
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	5.4	5.4	m3
End of 1993:	5.4	5.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008C

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Waste material weights and isotopic composition are unknown for this waste stream.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** RH **GENERATOR SITE** IN

WASTE STREAM MWIR ID	IN-W146	**STREAM NAME**	Uncategorized Inorganic Sludges
WIPP ID	IN-W146		
Local ID	ID-EGG-291T	**DESCRIPTION**	TRU Heavy Metal Sludge
MATRIX CODE	3129		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Solidified Inorganics		
Site Matrix Description	10 drums of TRU, mixed waste sludge was generated from cleaning of 4 catch tanks. Concentrations of radionuclides and hazardous waste vary from drum to drum.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	*Mixed TRU*	X	*Rsearch and Devel. Waste*	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

225

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING RH GENERATOR SITE IN

IN-W146

CONTAINER: Drum
Type/Size: 55-gallon

Container Mat'l: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 10
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	394.2	173.1	528.8
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	399.0	173.1	528.8
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	2.1	2.1	m3
End of 1993:	2.1	2.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A
D007A
D008A
D009A
D011A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	3.24E-01	Curies/m3
Ce144	1.38E+00	Curies/m3
Cm244	4.07E-01	Curies/m3
Co60	7.21E-01	Curies/m3
Cs134	2.80E+00	Curies/m3
Cs137	3.07E+01	Curies/m3
Eu154	3.55E-01	Curies/m3
Eu155	2.01E+05	Curies/m3
Pu238	3.71E-01	Curies/m3
Pu239	3.04E-01	Curies/m3
Sb125	1.34E-01	Curies/m3
Sr90	4.18E+01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | **WASTE TYPE** MTRU | **HANDLING** CH | **GENERATOR SITE** RF

WASTE STREAM MWIR ID	IN-W157
WIPP ID	IN-W157
Local ID	ID-EGG-112T-004
MATRIX CODE	3150
SITE FINAL FORM IDC	
STREAM NAME	Solidified Process Residues
DESCRIPTION	Cemented Sludges (TRU): Special Setups (Cement)
Waste Matrix Code Group	Solidified Inorganics
Site Matrix Description	This waste comes from the Rocky Flats Plant. It contains organic, alcohols, organic acids and Ethylene Diamine Tetra Acetic Acid (Versenes) set in portland and magnesia cements.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 213

TRUCON CODE ID 213

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

236

287

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU   HANDLING CH   GENERATOR SITE RF

IN-W157   CONTAINER: SWB overpack   Type/Size:

Container Matl: steel   Int. Vol/Ctnr: 1.9 m3

Liner Type: Liner Material:

Number Stored: 76   Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	11.8	0.0	142.3
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	381.8	226.4	594.2
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

Comments

76 in number stored is the number of SWBs that will result from overpacking 4 drums/SWB.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	63.5	145.0	m3
End of 1993:	63.5	145.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B
D006A
D008A
F001
F002
F003

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	6.74E-02	Curies/m3
Pu52	2.95E+00	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W157 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 785
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	26.9	0.0	325.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	872.0	517.0	1357.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	163.0	163.0	m3
End of 1993:	163.0	163.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.54E-01	Curies/m3
Pu52	6.74E+00	Curies/m3

TYPICAL EPA CODES APPLICABLE

D002B
D006A
D008A
F001
F002
F003

238

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM
MWIR ID IN-W161
WIPP ID IN-W161
Local ID ID-EGG-115T-371

STREAM NAME *Ceramic/Brick Debris*

DESCRIPTION Concrete-Brick (TRU): Firebrick

MATRIX CODE 5230

SITE FINAL FORM IDC

Waste Matrix Code Group Inorganic Non-metal

Site Matrix Description This waste contains whole and broken pieces of construction bricks, cinderblocks, and firebrick. Waste generated in the 1971 to 1973 period includes firebrick from the Pu recovery incinerator and related refractory development and from four boilers; cinderblocks and other brick from routine maintenance and from following the Rocky Flats Plant fire. Waste generated since 1973 is mostly firebrick from Pu recovery operations. The firebrick generated since 1973 is a high-alumina, high-strengty, class f brick manufactured by Plibrico (Plicast 40). Typical composition is $A1203 = 95.67\%$, $SiO2 = 0.03\%$, $Fe203 = 0.10\%$, $TiO2 = 0.01\%$, $CaO = 3.6\%$, $MgO = 0.8\%$, and Alkalies = 0.28%. Some of the incinerator firebrick is scarfed to remove surface contamination and then leached with nitric acid to recover Pu.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 122; 222B

TRUCON CODE ID 122; 222B

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	*Mixed TRU*	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

239

240

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W161

CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 23
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	193.1	48.6	385.4
Cellulosics	9.2	11.5	22.9
Rubber	0.0	0.0	0.0
Plastics	9.1	4.9	16.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	18.7	42.8	m3
End of 1993:	18.7	42.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

F001

F002

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.11E-02	Curies/m3
Pu52	1.30E+01	Curies/m3
U235	1.14E-07	Curies/m3

Comments

23 in number stored is the number of SWBs that will result from overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W161

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 443
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	441.0	111.0	880.0
Cellulosics	21.0	26.2	52.4
Rubber	0.0	0.0	0.0
Plastics	20.8	11.3	37.2
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	92.1	92.1	m3
End of 1993:	92.1	92.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

F001
F002

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	4.82E-02	Curies/m3
Pu52	2.97E+01	Curies/m3
U235	2.60E-07	Curies/m3

241

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

WASTE STREAM MWIR ID	IN-W166	**STREAM NAME**	Solidified Process Residues
WIPP ID	IN-W166		
Local ID	ID-EGG-112T-114	**DESCRIPTION**	Cemented Sludges (TRU): Solid Inorganic Process Solution
MATRIX CODE	3150		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Solidified Inorganics		
Site Matrix Description	Solid inorganic process solution waste consists of cemented inorganic particulates of sludge-like (not chemically precipitated) wastes from plutonium recovery operations.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 114

TRUCON CODE ID 114

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

243

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W166 CONTAINER: SWB overpack
Type/Size:

Container Mat'l: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 24
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	214.1	12.6	330.5
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	91.5	44.2	227.4
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	19.8	45.2	m3
End of 1993:	19.8	45.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.19E-02	Curies/m3
Pu52	1.26E+01	Curies/m3

TYPICAL EPA CODES APPLICABLE

D008A
F001
F002
F003

Comments

24 in number stored is the number of SWBs that will result from overpacking 4 drums per SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN **WASTE TYPE** MTRU **HANDLING** CH **GENERATOR SITE** RF

IN-W166 **CONTAINER:** Drum **Type/Size:** 55-gallon

Container Matl: steel **Int. Vol/Ctnr:** 0.208 m3

Liner Type: **Liner Material:**

Number Stored: 245 **Number Projected:** 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	489.0	28.8	754.8
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	208.9	101.0	519.2
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	51.0	51.0	m3
End of 1993:	51.0	51.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008A
F001
F002
F003

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.71E-02	Curies/m3
Pu52	2.88E+01	Curies/m3

244

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | **WASTE TYPE** MTRU | **HANDLING** CH | **GENERATOR SITE** RF

WASTE STREAM MWIR ID	IN-W167
WIPP ID	IN-W167
Local ID	ID-EGG-112T-112
MATRIX CODE	3150
SITE FINAL FORM IDC	
STREAM NAME	Solidified Process Residues
DESCRIPTION	Cemented Sludges (TRU): Solid Organics
Waste Matrix Code Group	Solidified Organics
Site Matrix Description	TRU solid organic waste consisting of cemented or absorbed organic liquids from production or laboratory processes.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 112

TRUCON CODE ID 112

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

246

240

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W167 CONTAINER: SWB overpack
Type/Size:

Container Mat'l: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 55
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	240.0	90.5	294.8
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	176.6	65.2	212.6
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	45.9	104.5	m3
End of 1993:	45.9	104.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.85E-02	Curies/m3
Pu52	2.76E+00	Curies/m3

TYPICAL EPA CODES APPLICABLE

D022
F001
F003

Comments

55 in number stored is the number of SWBs that will result from overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

IN-W167

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 568
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	548.1	206.7	673.1
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	394.2	149.0	485.6
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	118.1	118.1	m3
End of 1993:	118.1	118.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D022
F001
F003

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	4.23E-02	Curies/m3
Pu52	6.31E+00	Curies/m3

000247

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM MWIR ID	IN-W169
WIPP ID	IN-W169
Local ID	ID-EGG-114T-330
MATRIX CODE	5440
SITE FINAL FORM IDC	
STREAM NAME	Predominantly Combustible Debris
DESCRIPTION	Combustibles (TRU): Dry paper and rags
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	*The waste stream is from Rocky Flats Plant and primarily consists of* line- and nonline-generated dry combustible materials such as paper, rags, plastics, surgical gloves, cloth overalls and booties, cardboard, wood, wood filters frames, PE bottles, and laundry lint. Some combustibles may be damp or moist. Limited amounts of noncombustibles such as glass, concrete, cement, lead glovebox gloves, batteries, and metal scrap may also be present.

NO MIGRATION VARIANCE PETITION ASSIGNMENT *ID 116; 216C*

TRUCON CODE ID 216C

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	*Mixed TRU*	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000248

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W169

CONTAINER: Drum
Type/Size: 55-gallon

Container Mat'l: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 20822
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	36.8	0.0	233.0
Other Inorganic Materials	27.2	0.0	196.0
Cellulosics	135.0	6.6	817.0
Rubber	57.2	0.0	330.0
Plastics	188.0	14.8	887.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4331.0	4331.0	m3
End of 1993:	4331.0	4331.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	3.79E-01	Curies/m3
Pu52	4.39E+00	Curies/m3
U235	2.59E-06	Curies/m3
U238	8.48E-11	Curies/m3

TYPICAL EPA CODES APPLICABLE

D008A
D008C
D022
D029
F001
F002
F003
F005
F005A

Comments

10% of this waste stream volume is classified as RH-TRU without current shielding. It is anticipated that the RH-TRU portion will be shipped as CH-TRU with internal shielding.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** AE

WASTE STREAM MWIR ID	IN-W170	**STREAM NAME**	Predominantly Combustible Debris
WIPP ID	IN-W170		
Local ID	ID-EGG-114T-120	**DESCRIPTION**	Combustibles (TRU): Decontamination/Decommissioning Waste Combustible Solids
MATRIX CODE	5440		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Heterogeneous		
Site Matrix Description	This waste is generated at Argonne National Laboratory. The waste is derived from decontamination and disposal of facilities and ancillary systems (e.g. gloveboxes). The composition of the waste is unknown. It is expected to contain some cadmium and lead, and may contain F-listed wastes.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

052000

00257

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE AE

IN-W170 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 2
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	36.8	0.0	63.2
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	2.6	0.0	10.5
Cellulosics	213.2	61.6	357.9
Rubber	2.4	1.6	7.2
Plastics	21.3	4.7	57.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.4	m3
End of 1993:	0.4	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	1.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D004A
D006A
D008A
F003

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	5.14E+00	Curies/m3
Pu239	2.06E+01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN **WASTE TYPE** MTRU **HANDLING** CH **GENERATOR SITE** AE

WASTE STREAM MWIR ID	IN-W171	**STREAM NAME**	Predominantly Combustible Debris
WIPP ID	IN-W171		
Local ID	ID-EGG-114T-110	**DESCRIPTION**	Combustibles (TRU): Research generated waste compactible and combustible solids.
MATRIX CODE	5440		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Heterogeneous		
Site Matrix Description	This waste is generated at Argonne National Laboratory-East. The waste is derived from research activities performed in a research environment. The waste includes soft plastics, cardboard, rags, paper, and cloth from various processes. The waste is packaged in 55-gallon drums or in standard waste boxes.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT **TRUCON CODE**

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000253

002253

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE AE

IN-W171

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 17
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	4.8	0.0	14.4
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	4.8	0.0	19.2
Cellulosics	287.7	53.4	432.7
Rubber	3.3	1.4	8.7
Plastics	36.0	2.9	60.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3.6	3.6	m3
End of 1993:	3.6	3.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D004A
D006A
D008A
F003

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	4.00E-01	Curies/m3
Am243	1.71E-03	Curies/m3
Pu239	5.13E+00	Curies/m3
Pu241	5.19E+01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** BT

WASTE STREAM MWIR ID	IN-W172	**STREAM NAME**	Predominantly Combustible Debris
WIPP ID	IN-W172		
Local ID	ID-EGG-114T-010	**DESCRIPTION**	Combustibles (TRU): Combustibles
MATRIX CODE	5440		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Heterogeneous		

Site Matrix Description: This waste stream, generated at Bettis Atomic Power Laboratory, consists primarily of rags, gloves, plastic, paper, carbo-wax, filters, oil-contaminated absorbent (diatomaceous earth), and rubber. The waste stream may also contain noncombustible items. Levels of hazardous materials are unknown.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	*Mixed TRU*	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		*Unknown*		*Decon and Decommissioning*	X		*N/A*	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000254

000253

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE BT

IN-W172 | CONTAINER: Drum | Type/Size: 55-gallon | Container Matl: steel | Int. Vol/Ctnr: 0.208 m3 | Liner Type: | Liner Material: | Number Stored: 796 | Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	2.9	0.0	7.2
Cellulosics	575.6	105.8	961.5
Rubber	55.2	55.2	163.5
Plastics	165.6	105.8	288.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	165.6	165.6	m3
End of 1993:	165.6	165.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

F001

F002

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Typical isotopic composition is unknown for this waste stream.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** MD

WASTE STREAM MWIR ID	IN-W174	**STREAM NAME**	Absorbed Aqueous Liquids
WIPP ID	IN-W174		
Local ID	ID-EGG-112T-834	**DESCRIPTION**	Cemented Sludges (TRU): High Level Acid
MATRIX CODE	3113		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Solidified Organics		
Site Matrix Description	This waste comes from Mound Laboratory. It consists of acid liquids, mainly nitric, absorbed onto a clay called Florco.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

IN-W174 CONTAINER: SWB overpack Type/Size: Container Mat'l: steel Int. Vol/Ctnr: 1.9 m3 Liner Type: Liner Material: Number Stored: 51 Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	172.6	75.8	231.6
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	174.7	75.8	231.6
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	42.3	98.0	m3
End of 1993:	42.3	98.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	6.64E+00	Curies/m3
Pu239	4.45E-03	Curies/m3
Pu240	8.85E-03	Curies/m3

TYPICAL EPA CODES APPLICABLE

D001C

D002A

Comments

51 in number stored is the number of SWBs that will result from overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

IN-W174 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 523
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	394.2	173.1	528.8
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	399.0	173.1	528.8
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	108.8	108.8	m3
End of 1993:	108.8	108.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D001C

D002A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.52E+01	Curies/m3
Pu239	1.02E-02	Curies/m3
Pu240	2.02E-02	Curies/m3

0002583

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

WASTE STREAM

MWIR ID: IN-W177
WIPP ID: IN-W177
Local ID: ID-EGG-112T-835

MATRIX CODE: 3150

SITE FINAL FORM IDC:

STREAM NAME: Solidified Process Residues

DESCRIPTION: Cemented Sludges (TRU): High Level Caustic

Waste Matrix Code Group: Solidified Inorganics

Site Matrix Description: This waste comes from Mound Laboratory. It consists of caustic waste and neutralized waste liquids, adsorbed onto a clay (Florco).

NO MIGRATION VARIANCE PETITION ASSIGNMENT:

TRUCON CODE:

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	*Mixed TRU*	X	*Rsearch and Devel. Waste*	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

IN-W177

CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 60
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	172.6	75.8	231.6
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	174.7	75.8	231.6
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	49.3	112.6	m3
End of 1993:	49.3	112.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	7.59E+00	Curies/m3
Pu239	2.22E-03	Curies/m3
Pu52	1.69E-04	Curies/m3
Pu83	2.84E-02	Curies/m3

Comments

60 in number stored is the number of SWBs that will result from overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN   WASTE TYPE MTRU   HANDLING CH   GENERATOR SITE MD

IN-W177   CONTAINER: Drum   Type/Size: 55-gallon

Container Matl: steel   Int. Vol/Ctnr: 0.208 m3

Liner Type: Liner Material:

Number Stored: 610   Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	394.2	173.1	528.8
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	399.0	173.1	528.8
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	126.8	126.8	m3
End of 1993:	126.8	126.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.73E+01	Curies/m3
Pu239	5.08E-03	Curies/m3
Pu52	3.85E-04	Curies/m3
Pu83	6.49E-02	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** MD

WASTE STREAM MWIR ID	IN-W179
WIPP ID	IN-W179
Local ID	ID-EGG-112T-836
MATRIX CODE	3150
SITE FINAL FORM IDC	
STREAM NAME	Solidified Process Residues
DESCRIPTION	Cemented Sludges (TRU): High Level Sludge/Cement
Waste Matrix Code Group	Solidified Inorganics
Site Matrix Description	This waste comes from Mound Laboratory. The waste consists of shower water, decontamination water, cooling water, and some acids and caustics which have been solidified in portland cement.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

0002263

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU   HANDLING CH   GENERATOR SITE MD

IN-W179   CONTAINER: SWB overpack   Type/Size:

Container Matl: steel   Int. Vol/Ctnr: 1.9 m3

Liner Type: Liner Material:

Number Stored: 2   Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	172.6	75.8	231.6
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	174.7	75.8	231.6
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

Comments

2 in number stored is the number of SWBs that will result from overpacking 4 drums/SWB.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.5	3.8	m3
End of 1993:	1.5	3.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B
D006A
D007A
D008A
D009A
D010A
D011A
F001
F003
P015

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	2.95E+00	Curies/m3
Pu83	8.99E-02	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

IN-W179

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 19
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	394.2	173.1	528.8
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	399.0	173.1	528.8
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4.0	4.0	m3
End of 1993:	4.0	4.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B
D006A
D007A
D008A
D009A
D010A
D011A
F001
F003
P015

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	6.73E+00	Curies/m3
Pu83	2.05E-01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM

MWIR ID	IN-W181
WIPP ID	IN-W181
Local ID	ID-EGG-112T-978
MATRIX CODE	3150
SITE FINAL FORM IDC	

STREAM NAME Solidified Process Residues

DESCRIPTION Cemented Sludges (TRU): Laundry Sludge

Waste Matrix Code Group Solidified Inorganics

Site Matrix Description This waste is from Rocky Flats. The waste consists of sludge from laundry operations that have been cemented in portland. The cement is described as a poor grade.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 211A

TRUCON CODE ID 211A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000265

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

992000

IN-W181 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 46
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	3.4	3.4	3.4
Cellulosics	34.8	0.0	85.2
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	9.4	8.7	9.8
Solidified, Organic matrix	772.0	536.0	947.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	9.5	9.5	m3
End of 1993:	9.5	9.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B
D006A
D007A
D008A
D009A
F001
F002
F003
P015

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	2.50E+00	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID	IN-W186
WIPP ID	IN-W186
Local ID	ID-EGG-114T-116
MATRIX CODE	5440
SITE FINAL FORM IDC	
STREAM NAME	*Predominantly Combustible Debris*
DESCRIPTION	Combustibles (TRU): Combustible Waste
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	Combustible waste consists of cellulosic, plastic or cloth waste from various processes.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 116

TRUCON CODE ID 116

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	*Mixed TRU*	X	*Rsearch and Devel. Waste*	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

1900331

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

IN-W186

CONTAINER: Drum
Type/Size: 55-gallon

Container Mat'l: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 12958
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	2.9	0.0	7.2
Cellulosics	575.6	105.8	961.5
Rubber	55.2	55.2	163.5
Plastics	165.6	105.8	288.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	2695.1	2695.1	m3
End of 1993:	2695.1	2695.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008A
F001
F002

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	6.68E-02	Curies/m3
Pu52	4.51E+00	Curies/m3
U235	6.50E-07	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM	**MWIR ID**	IN-W188
	WIPP ID	IN-W188
	Local ID	ID-EGG-112T-976
MATRIX CODE		3150
SITE FINAL FORM IDC		

STREAM NAME Solidified Process Residues

DESCRIPTION Cemented Sludges (TRU): Building 776 Process Sludge

Waste Matrix Code Group Solidified Inorganics

Site Matrix Description This waste is from Rocky Flats. The waste consists of sludge from floor drains in a Pu process facility that have been cemented in portland. The cement is described as poor grade.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 211A

TRUCON CODE ID 211A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

000270

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W188 CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	1.5	1.5	1.5
Cellulosics	15.2	0.0	37.3
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	4.1	3.8	4.3
Solidified, Organic matrix	338.0	235.0	415.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.3	1.9	m3
End of 1993:	0.3	1.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	3.96E+00	Curies/m3

TYPICAL EPA CODES APPLICABLE

D002B
D006A
D007A
D008A
D009A
D022
D028
F001
F002
F003
P015

Comments

1 in number stored is the number of SWBs that will result from overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W188 CONTAINER: Drum Type/Size: 55-gallon Container Matl: steel Int. Vol/Ctnr: 0.208 m3 Liner Type: Liner Material: Number Stored: 4 Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	3.4	3.4	3.4
Other Inorganic Materials	34.8	0.0	85.2
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	9.4	8.7	9.8
Solidified, Inorganic matrix	772.0	536.0	947.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.8	0.8	m3
End of 1993:	0.8	0.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B
D006A
D007A
D008A
D009A
D022
D028
F001
F002
F003
P015

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	9.04E+00	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM	**MWIR ID**	IN-W189	
	WIPP ID	IN-W189	
	Local ID	ID-EGG-109T-464	
MATRIX CODE		5440	
SITE FINAL FORM IDC			

STREAM NAME Predominantly Combustible Debris

DESCRIPTION Benelex, Plexiglass (TRU): Benelex and Plexiglass

Waste Matrix Code Group Heterogeneous

Site Matrix Description This waste, generated at Rocky Flats Plant, contains mainly Benelex which is a dense, laminated, lignocellulose hardboard made from wood chips and particles (masonite corp. type 402). The benelex is generally 2 inches thick. Some of the Benelex has lead shielding attached to it. Metal hinges, and angle iron strongbacks are also present. Plexiglass is the other major constituent in the waste. The plexiglass thickness ranges from 2 to 4 inches. Both the Benelex and the Plexiglass are combustible.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 221A

TRUCON CODE ID 221A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000273

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU   HANDLING CH   GENERATOR SITE RF

IN-W189

CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 2
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.8	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	3.4	0.0	0.0
Other Inorganic Materials	48.6	0.0	0.0
Cellulosics	17.2	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	88.9	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.7	3.8	m3
End of 1993:	1.7	3.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008C

F001

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	2.64E+00	Curies/m3

Comments

2 in number stored is the number of SWBs that will result from overpacking 4 drums per SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W189 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 21
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	1.9	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	7.7	*0.0*	*0.0*
Other Inorganic Materials	111.0	0.0	0.0
Cellulosics	39.2	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	203.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4.4	4.4	m3
End of 1993:	4.4	4.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008C

F001

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	6.03E+00	Curies/m3

002274

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM MWIR ID	IN-W197
WIPP ID	IN-W197
Local ID	ID-EGG-114T-336
MATRIX CODE	5440
SITE FINAL FORM IDC	
STREAM NAME	Predominantly Combustible Debris
DESCRIPTION	Combustibles (TRU): Moist paper and rags
Waste Matrix Code Group	*Heterogeneous*
Site Matrix Description	The waste stream is from the Rocky Flats Plant and primarily consists of damp or wet line- and nonline-generated dry combustible materials such as paper, rags, plastics, surgical gloves, canvas, cardboard, wood, PE bottles, and rubber. Some combustibles may be damp or moist. Moisture content may range from damp to wet, and may include water, soaps, nitric acid, or caustic solutions. Limited amounts of noncombustibles such as glass, concrete, cement, leaded glovebox gloves, and metal scrap may also be present. These wastes are mostly from decontamination and cleanup work, and may be from any plutonium area.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 116; 216A

TRUCON CODE ID 216A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000275

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

000276

IN-W197 CONTAINER: SWB overpack Type/Size:

Container Matl: steel Int. Vol/Ctnr: 1.9 m3

Liner Type: Liner Material:

Number Stored: 46 Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.3	0.0	1.9
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.9	0.0	5.3
Other Inorganic Materials	8.0	0.0	30.5
Cellulosics	20.8	0.7	66.1
Rubber	4.0	0.0	26.1
Plastics	31.8	5.7	110.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

Comments

46 in number stored is the number of SWBs that will result from overpacking 4 drums/SWB.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	38.3	87.2	m3
End of 1993:	38.3	87.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D001C
D002B
D008A
D008C
D022
F001
F002
F003
F005A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	3.61E-01	Curies/m3
Pu52	2.20E+00	Curies/m3
U235	4.26E-07	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN   WASTE TYPE MTRU   HANDLING CH   GENERATOR SITE RF

IN-W197   CONTAINER: Drum   Type/Size: 55-gallon

Container Matl: steel   Int. Vol/Ctnr: 0.208 m3

Liner Type: Liner Material:

Number Stored: 2623   Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.7	0.0	4.4
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	2.0	0.0	12.2
Other Inorganic Materials	18.3	0.0	69.7
Cellulosics	47.4	1.6	151.0
Rubber	9.1	0.0	59.7
Plastics	72.6	13.1	253.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	545.5	545.5	m3
End of 1993:	545.5	545.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	8.25E-01	Curies/m3
Pu52	5.02E+00	Curies/m3
U235	9.72E-07	Curies/m3

TYPICAL EPA CODES APPLICABLE

D001C
D002B
D008A
D008C
D022
F001
F002
F003
F005A

Comments

11% of this waste stream volume is classified as RH-TRU without current shielding. It is anticipated that the RH-TRU portion will be shipped as CH-TRU with internal shielding.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM

MWIR ID IN-W198

WIPP ID IN-W198

Local ID ID-EGG-114T-337

MATRIX CODE 5310

SITE FINAL FORM IDC

STREAM NAME Plastic/Rubber Debris

DESCRIPTION Combustibles (TRU): Plastics, Teflon, Wash and PVC

Waste Matrix Code Group Combustible

Site Matrix Description The waste stream is from the Rocky Flats Plant and consists of various types of plastics such as PE, Polyvinyl chloride (PVC), teflon (TFE), and nonleaded rubber items. The waste may be bags, vials, bottles, sheeting, and surgical gloves. Some other combustible wastes such as respirator facemasks and paper may be included. Some small amounts of noncombustible wastes may also be present.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 116; 216C

TRUCON CODE ID 216C

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

0002183

000279

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

IN-W198 CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 34
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.1	0.0	0.5
Other Inorganic Materials	9.6	3.3	21.5
Cellulosics	9.4	0.0	61.7
Rubber	31.2	0.0	138.8
Plastics	24.8	0.0	44.7
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

Comments

34 in number stored is the number of SWBs that will result from overpacking 4 drums/SWB.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	28.0	63.9	m3
End of 1993:	28.0	63.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008A
D008C
D022
D029
F001
F002
F003
F005A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	7.12E-01	Curies/m3
Np237	9.99E-06	Curies/m3
Pu242	1.59E-05	Curies/m3
Pu52	2.86E+00	Curies/m3
U235	3.94E-08	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W198 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 480
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.2	0.0	1.1
Other Inorganic Materials	21.9	7.4	49.2
Cellulosics	21.5	0.0	141.0
Rubber	71.3	0.0	317.0
Plastics	56.6	0.0	102.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	99.9	99.9	m3
End of 1993:	99.9	99.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008A
D008C
D022
D029
F001
F002
F003
F005A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.63E+00	Curies/m3
Np237	2.28E-05	Curies/m3
Pu242	3.63E-05	Curies/m3
Pu52	6.52E+00	Curies/m3
U235	8.99E-08	Curies/m3

Comments

13% of this waste stream volume is classified as RH-TRU without current shielding. It is anticipated that the RH-TRU portion will be shipped as CH-TRU with internal shielding.

000280

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM
MWIR ID: IN-W202
WIPP ID: IN-W202
Local ID: ID-EGG-114T-970

STREAM NAME: Wood Debris

DESCRIPTION: Combustibles (TRU): Wood

MATRIX CODE: 5320

SITE FINAL FORM IDC:

Waste Matrix Code Group: Combustible

Site Matrix Description: This waste stream is from the Rocky Flats Plant and primarily consists of wood in the form of lumber, plywood, filter frames, and possibly ladders. Some of the items such as plastic sheeting, Kimwipes, and other combustibles are also present. Plastic sheeting may have some paint coatings. Limited noncombustibles such as nails and sheetrock may also be included.

NO MIGRATION VARIANCE PETITION ASSIGNMENT: ID 216A

TRUCON CODE: ID 216A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

1800281

282000

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W202 CONTAINER: Drum Type/Size: 55-gallon

Container Matl: steel Int. Vol/Ctnr: 0.208 m3

Liner Type: Liner Material:

Number Stored: 529 Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	20.7	16.3	24.9
Cellulosics	186.0	170.0	202.0
Rubber	0.0	0.0	0.0
Plastics	22.6	14.9	8.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	109.9	109.9	m3
End of 1993:	109.9	109.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008A

F001

F002

F003

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	1.79E+00	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** MD

WASTE STREAM

MWIR ID	IN-W203
WIPP ID	IN-W203
Local ID	ID-EGG-114T-826
MATRIX CODE	5440
SITE FINAL FORM IDC	

STREAM NAME Predominantly Combustible Debris

DESCRIPTION Combustibles (TRU): Combustible Equipment Boxes or Floor Sweeping and Rust

Waste Matrix Code Group Heterogeneous

Site Matrix Description This waste stream, generated at Mound Laboratory, includes two different types of waste depending on when the waste was generated. Prior to 1980, this content code was used for glove box floor sweepings and rust. The actual amount of floor sweeping is small. After 1981, this content code is used for large combustible waste items such as plastic tanks, plexiglass shielding and windows, wood, and fiberglass conveyor glove box sections. These types of large combustible wastes were included in content code 824 prior to 1980. Limited amounts of small combustibles such as shoe covers and surgical gloves are also included.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN **WASTE TYPE** MTRU **HANDLING** CH **GENERATOR SITE** MD

IN-W203 **CONTAINER:** Drum **Type/Size:** 55-gallon **Container Matl:** steel **Int. Vol/Ctnr:** 0.208 m3 **Liner Type:** **Liner Material:** **Number Stored:** 346 **Number Projected:** 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.3	0.0	17.9
Other Inorganic Materials	11.1	0.0	17.3
Cellulosics	63.0	63.0	706.7
Rubber	19.3	19.3	194.4
Plastics	191.8	158.7	706.7
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	71.9	71.9	m3
End of 1993:	71.9	71.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.69E-01	Curies/m3
Pu238	7.64E-01	Curies/m3
Pu239	2.19E-02	Curies/m3
Pu240	1.07E-02	Curies/m3
Pu83	1.42E-01	Curies/m3

TYPICAL EPA CODES APPLICABLE

D009A

D009D

Comments

These drums have been repacked from boxes.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** MD

WASTE STREAM MWIR ID	IN-W204	**STREAM NAME**	Predominately Combustible Debris
WIPP ID	IN-W204		
Local ID	ID-EGG-114T-827	**DESCRIPTION**	Combustibles (TRU): Combustible Equipment Drums
MATRIX CODE	5440		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Heterogeneous		
Site Matrix Description	This waste stream is smaller combustible items from Mound Laboratory which fit into drums.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

98087

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

IN-W204

CONTAINER: Drum
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.1	0.0	7.8
Other Inorganic Materials	4.9	0.0	7.6
Cellulosics	27.6	27.6	309.5
Rubber	8.4	8.4	85.1
Plastics	84.0	69.5	309.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	201.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.5	1.9	m3
End of 1993:	0.5	1.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	3.36E+00	Curies/m3
Pu52	6.89E-02	Curies/m3
Pu83	4.18E+00	Curies/m3

TYPICAL EPA CODES APPLICABLE

D008A
D009A
D009D

Comments

1 in number stored is the number of SWBs that will result from overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

IN-W204 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 6
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.3	0.0	17.9
Other Inorganic Materials	11.1	0.0	17.3
Cellulosics	63.0	63.0	706.7
Rubber	19.3	19.3	194.4
Plastics	191.8	158.7	706.7
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.3	1.3	m3
End of 1993:	1.3	1.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008A
D009A
D009D

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	7.68E+00	Curies/m3
Pu52	6.89E+02	Curies/m3
Pu83	9.55E+00	Curies/m3

000287

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID	IN-W205	**STREAM NAME**	Combustible Debris
WIPP ID	IN-W205		
Local ID	ID-EGG-114T-900	**DESCRIPTION**	Combustibles (TRU): Low Specific Activity Plastics, Paper, etc.
MATRIX CODE	5300		
SITE FINAL FORM IDC			

Waste Matrix Code Group: Combustible

Site Matrix Description: This waste stream from the Rocky Flats Plant primarily consists of line- and nonline-generated combustible materials such as plastics, paper, empty PE bottles, booties, paper, plastic sheeting, and surgical gloves. The waste may be dry or damp. Limited amounts of noncombustibles may also be present.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 216B

TRUCON CODE ID 216B

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000288

0002809

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

IN-W205 CONTAINER: SWB overpack
Type/Size:
Container Matl: steel
Int. Vol/Ctnr: 1.9 m3
Liner Type:
Liner Material:
Number Stored: 0
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	16.6	1.9	43.2
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	40.2	30.7	52.1
Cellulosics	57.4	27.9	109.9
Rubber	10.1	3.8	15.9
Plastics	7.9	13.8	21.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.6	m3
End of 1993:	0.2	0.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	1.72E-01	Curies/m3

TYPICAL EPA CODES APPLICABLE

D008A
F001
F002
F003

Comments

.25 in number stored is the number of SWBs that will result from overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W205

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 3
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	37.8	4.4	98.6
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	91.9	70.1	119.0
Cellulosics	131.0	63.6	251.0
Rubber	23.0	8.7	36.3
Plastics	18.0	31.5	49.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.6	0.6	m3
End of 1993:	0.6	0.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008A
F001
F002
F003

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	3.95E-01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** MD

WASTE STREAM MWIR ID	IN-W214
WIPP ID	IN-W214
Local ID	ID-EGG-118T-813
MATRIX CODE	5410
SITE FINAL FORM IDC	
STREAM NAME	Composite Filters
DESCRIPTION	Filters (TRU): Glass Filters and Fiberglass
Waste Matrix Code Group	Filter
Site Matrix Description	This waste stream generated at the Mound Laboratory, consists primarily of spun glass filters and fiberglass glovebox prefilters. The waste may include limited amounts of other noncombustibles.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

0002791

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

IN-W214 CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	85.3	10.5	128.4
Cellulosics	2.1	0.5	4.2
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.4	m3
End of 1993:	0.2	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	3.36E+02	Curies/m3
Pu239	2.99E+00	Curies/m3

TYPICAL EPA CODES APPLICABLE

D001C
D002B
D009A
D009D

Comments

1 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

6002293

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

IN-W214 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 3
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	194.7	24.0	293.3
Cellulosics	4.8	1.2	9.6
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.5	0.5	m3
End of 1993:	0.5	0.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	7.66E+02	Curies/m3
Pu239	6.83E+00	Curies/m3

TYPICAL EPA CODES APPLICABLE

D001C
D002B
D009A
D009D

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

WASTE STREAM

MWIR ID IN-W216

WIPP ID IN-W216

Local ID ID-EGG-102T-001

STREAM NAME Solidified Process Residues

DESCRIPTION Uncemented inorganic sludge (TRU): First stage sludge.

MATRIX CODE 3150

SITE FINAL FORM IDC

Waste Matrix Code Group: Solidified Inorganics

Site Matrix Description: The waste stream generated at Rocky Flats Plant, consists of first and second stage sludges. Sludges were combined starting in 1979 to reduce the radiation levels of first stage sludge. Portland cement was added to absorb free liquids.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 211A

TRUCON CODE ID 211A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X
Non-Defense TRU Waste	
Commercial TRU Waste	
Unknown	

Mixed TRU	X
Non-Mixed TRU	
Suspect Mixed TRU	
Unknown	

Rsearch and Devel. Waste	X
Operations Waste	X
Residues	
Decon and Decommissioning	
Environmental Restoration	
From Treatment of Waste	
Maintenance	

TSCA	
Asbestos	
PCBs	
Other	
N/A	X
Unknown	

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

0009293

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W216 CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 639
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	1.5	1.5	1.5
Other Inorganic Materials	15.2	0.0	37.3
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	4.1	3.8	4.3
Solidified, Inorganic matrix	338.0	235.0	415.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	532.0	1214.0	m3
End of 1993:	532.0	1214.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.14E+01	Curies/m3
Pu52	3.71E+00	Curies/m3

TYPICAL EPA CODES APPLICABLE

D002B
D005A
D006A
D007A
D008A
D009A
D011A
D022
D028
F001
F002
F003
P015

Comments

639 in number of stored is the number of SWBs that will result from overpacking 4 drums per SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **IN** | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

IN-W216

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type:
Liner Material:
Number Stored: 6571
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	3.4	3.4	3.4
Other Inorganic Materials	34.8	0.0	85.2
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	9.4	8.7	9.8
Solidified, Inorganic matrix	772.0	536.0	947.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1367.0	1367.0	m3
End of 1993:	1367.0	1367.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.60E+01	Curies/m3
Pu52	8.47E+00	Curies/m3

TYPICAL EPA CODES APPLICABLE

D002B
D005A
D006A
D007A
D008A
D009A
D011A
D022
D028
F001
F002
F003
P015

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF, AE

WASTE STREAM
- **MWIR ID** IN-W220
- **WIPP ID** IN-W220
- **Local ID** ID-EGG-102T-111

MATRIX CODE 3150

SITE FINAL FORM IDC

STREAM NAME Solidified Process Residues

DESCRIPTION Uncemented inorganic sludge (TRU): Research generated waste noncompactible solids or solids wet sludge.

Waste Matrix Code Group Solidified inorganics

Site Matrix Description This waste includes waste generated at ANL-East and solid wet sludge from the Rocky Flats Plant. The ANL-E waste is derived from research activities performed in a laboratory environment. The waste includes concrete and laboratory apparatus. The RFP solid wet sludge is cemented or dewatered sludge precipitated from aqueous waste treatment processes. Soils that are not contaminated with or by chemicals are also included.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 111

TRUCON CODE ID 111

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X
Non-Defense TRU Waste	
Commercial TRU Waste	
Unknown	

Mixed TRU	X
Non-Mixed TRU	
Suspect Mixed TRU	
Unknown	

Rsearch and Devel. Waste	X
Operations Waste	X
Residues	
Decon and Decommissioning	X
Environmental Restoration	
From Treatment of Waste	
Maintenance	

TSCA		
	Asbestos	
	PCBs	
	Other	
	N/A	X
	Unknown	

Footnotes

ID 111 only applies to the RF waste.

0029 7

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF, AE

IN-W220 CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 187
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	1.5	1.5	1.5
Other Inorganic Materials	15.2	0.0	37.3
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	4.1	3.8	4.4
Solidified, Inorganic matrix	338.0	235.0	415.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

Comments

187 in number stored is the number of SWBs that will result from overpacking 4 drums per SWB.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	156.0	355.0	m3
End of 1993:	156.0	355.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B
D004A
D005A
D006A
D007A
D008A
D009A
F001
F002
F003
F005A
P015

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.70E+00	Curies/m3
Pu239	2.01E-02	Curies/m3
Pu240	2.71E-03	Curies/m3
Pu241	2.37E-03	Curies/m3
Pu52	1.96E+00	Curies/m3
U233	1.86E-04	Curies/m3
U235	1.69E-08	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF, AE

IN-W220

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 1916
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	3.4	3.4	3.4
Other Inorganic Materials	34.8	0.0	85.2
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	9.4	8.7	9.8
Solidified, Inorganic matrix	772.0	536.0	947.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	398.0	398.0	m3
End of 1993:	398.0	398.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	6.17E+00	Curies/m3
Pu239	4.60E-02	Curies/m3
Pu240	6.20E-03	Curies/m3
Pu241	5.42E-03	Curies/m3
Pu52	4.48E+00	Curies/m3
U233	4.25E-04	Curies/m3
U235	3.86E-08	Curies/m3

TYPICAL EPA CODES APPLICABLE

D002B
D004A
D005A
D006A
D007A
D008A
D009A
F001
F002
F003
F005A
P015

6220

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | **WASTE TYPE** MTRU | **HANDLING** CH | **GENERATOR SITE** RF

WASTE STREAM	MWIR ID	IN-W221
	WIPP ID	IN-W221
	Local ID	ID-EGG-102T-113
MATRIX CODE		3113
SITE FINAL FORM IDC		
STREAM NAME		Absorbed Aqueous Liquids
DESCRIPTION		Uncemented inorganic sludge (TRU): solid lab waste.
Waste Matrix Code Group		Solidified Inorganics
Site Matrix Description		Solid lab waste consists of cemented or absorbed neutralized aqueous laboratory waste.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 113

TRUCON CODE ID 113

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W221

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 69
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	26.9	0.0	325.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	872.0	517.0	1357.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	14.4	14.4	m3
End of 1993:	14.4	14.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B
F003

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	1.27E+01	Curies/m3
U235	1.09E-05	Curies/m3

103037

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

WASTE STREAM MWIR ID IN-W222

WIPP ID IN-W222

Local ID ID-EGG-102T-292

MATRIX CODE 3150

SITE FINAL FORM IDC

STREAM NAME Solidified Process Residues

DESCRIPTION Uncemented inorganic sludge (TRU): cemented sludge.

Waste Matrix Code Group: Solidified Inorganics

Site Matrix Description: This waste stream, generated at Rocky Flats Plant, consists of sludge from the incinerator off-gas system, recovery building filter plenums, pumps, etc. Portland cement is added to absorb free liquids. The sludge may contain a limited number of surgical gloves. Content code 292 replaced code 290 in 1973.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE ID NYD

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

IN-W222

CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 5
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.1	0.0	0.5
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	4.8	0.0	95.9
Cellulosics	0.2	0.0	1.4
Rubber	0.0	0.0	0.0
Plastics	18.2	3.8	29.9
Solidified, Inorganic matrix	126.6	70.1	208.4
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

Comments

5 in number stored is the number of SWBs that will result from overpacking 4 drums per SWB.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3.9	8.8	m3
End of 1993:	3.9	8.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B
D006A
D008A
F001
F002
F003
F003
F003

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	5.93E-03	Curies/m3
Pu52	2.81E+01	Curies/m3

0003023

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

IN-W222

CONTAINER:	Drum	Container Matl:	steel
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3
Liner Type:		Number Stored:	48
Liner Material:		Number Projected:	0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.1	0.0	1.1
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	10.9	0.0	219.0
Cellulosics	0.4	0.0	3.3
Rubber	0.0	0.0	0.0
Plastics	41.6	8.7	68.3
Solidified, Inorganic matrix	289.0	160.0	476.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	10.0	10.0	m3
End of 1993:	10.0	10.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B
D006A
D008A
F001
F002
F003
F003
F003

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.35E-02	Curies/m3
Pu52	6.42E+01	Curies/m3

F00304

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

WASTE STREAM MWIR ID	IN-W225
WIPP ID	IN-W225
Local ID	ID-EGG-109T-302
MATRIX CODE	5440
SITE FINAL FORM IDC	
STREAM NAME	Predominantly Combustible Debris
DESCRIPTION	Benelex, Plexiglass (TRU): Benelex and Plexiglass.
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	The waste, generated at Rocky Flats Plant, contains mainly Benelex which is a dense, laminated, lignocellulose hardboard made from wood chips and particles (masonite corp. type 402). The benelex is generally 2 inches thick. Some of the benelex has lead shielding attached to it. Metal hinges, and angle iron strongbacks are also present. Plexiglass is the other major consitutent in the waste. The plexiglass thickness ranges from 2 to 4 inches. Both the benelex and the plexiglass are combustible. Content Code 302 was replaced by 464 in 1973.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 121; 221A

TRUCON CODE ID 221A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W225 CONTAINER: SWB overpack
Type/Size:
Container Matl: steel
Int. Vol/Ctnr: 1.9 m3
Liner Type:
Liner Material:
Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	60.2	0.0	44.2
Cellulosics	81.9	0.0	364.8
Rubber	0.0	0.0	0.0
Plastics	87.1	6.7	168.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.9	3.8	m3
End of 1993:	0.9	3.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.80E-03	Curies/m3
Pu52	8.04E-01	Curies/m3

TYPICAL EPA CODES APPLICABLE

D008C
F001
F001
F001

Comments

1 in number stored is the number of SWBs that will result from overpacking 4 drums per SWB.

90309

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

IN-W225

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type:
Liner Material:
Number Stored: 11
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	37.0	0.0	101.0
Cellulosics	187.0	0.0	833.0
Rubber	0.0	0.0	0.0
Plastics	199.0	15.3	385.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	2.3	2.3	m3
End of 1993:	2.3	2.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	4.11E-03	Curies/m3
Pu52	1.84E+00	Curies/m3

TYPICAL EPA CODES APPLICABLE

D008C
F001
F001
F001

000307

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM

MWIR ID	IN-W228
WIPP ID	IN-W228
Local ID	ID-EGG-102T-002
MATRIX CODE	3121
SITE FINAL FORM IDC	

STREAM NAME Wastewater Treatment Sludges

DESCRIPTION Uncemented inorganic sludge (TRU): second stage sludge

Waste Matrix Code Group Solidified Inorganics

Site Matrix Description This waste stream, generated at the Rocky Flats Plant, consists of wet sludge from treatment of all other plant radioactive and/or chemical contaminated wastes, and further treatment of the first stage effluent. Some pre-1973 wastes may include non-sludge wastes such as electric motors, mercury and lithium batteries, bottles of liquid chemicals, and small amounts of mercury in pint bottles. Portland cement was added to absorb the free liquids.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 211A

TRUCON CODE ID 211A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000308

0003307

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W228 CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 248
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	9.9	0.0	45.1
Cellulosics	0.1	0.0	0.5
Rubber	0.0	0.0	0.0
Plastics	1.4	1.0	1.9
Solidified, Inorganic matrix	145.4	35.4	178.7
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

Comments

248 in number stored is the number of SWBs that will result from overpacking 4 drums per SWB.

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	206.0	471.0	m3
End of 1993:	206.0	471.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B
D003E
D005A
D006A
D007A
D008A
D009A
D009D
D011A
D022
D028
F001
F002
F003
F003
F003

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.62E-01	Curies/m3
Pu52	2.94E-01	Curies/m3

SITE NAME IN WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

P015

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

IN-W228

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 2559
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	22.7	0.0	103.0
Cellulosics	0.2	0.0	1.1
Rubber	0.0	0.0	0.0
Plastics	3.1	2.2	4.4
Solidified, Inorganic matrix	332.0	80.9	408.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	532.0	532.0	m3
End of 1993:	532.0	532.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	3.71E-01	Curies/m3
Pu52	6.72E-01	Curies/m3

TYPICAL EPA CODES APPLICABLE

D002B
D003E
D005A
D006A
D007A
D008A
D009A
D009D
D011A
D022
D028
F001
F002
F003
F003
F003

P015

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM MWIR ID	IN-W230
WIPP ID	IN-W230
Local ID	ID-EGG-115T-122
MATRIX CODE	5200
SITE FINAL FORM IDC	
STREAM NAME	Inorganic Non-Metal Debris
DESCRIPTION	Concrete-Brick (TRU): Inorganic Solid Waste
Waste Matrix Code Group	Inorganic Non-metal
Site Matrix Description	insulation, firebrick and concrete.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 122

TRUCON CODE ID 122

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

0033193

000314

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W230

CONTAINER: SWB
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 0
Number Projected: 6

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	231.6	21.1	547.4
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	5.1	11.6	m3
End of 1993:	5.1	11.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

F001

F002

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.23E-03	Curies/m3
Pu52	2.71E-03	Curies/m3
U235	3.42E-06	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | **WASTE TYPE** MTRU | **HANDLING** CH | **GENERATOR SITE** RF

IN-W230 | **CONTAINER:** Drum | **Type/Size:** 55-gallon | **Container Matl:** steel | **Int. Vol/Ctnr:** 0.208 m3 | **Liner Type:** | **Liner Material:** | **Number Stored:** 63 | **Number Projected:** 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	528.8	48.1	1250.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	13.1	13.1	m3
End of 1993:	13.1	13.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

F001

F002

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	5.08E-03	Curies/m3
Pu52	6.18E+01	Curies/m3
U235	7.80E-06	Curies/m3

000315

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME	IN	WASTE TYPE	MTRU	HANDLING	CH	GENERATOR SITE	RF

WASTE STREAM MWIR ID	IN-W240	**STREAM NAME**	Glass Debris
WIPP ID	IN-W240		
Local ID	ID-EGG-119T-118	**DESCRIPTION**	Glass (TRU): Glass Waste
MATRIX CODE	5220		
SITE FINAL FORM IDC			
Waste Matrix Code Group	*Inorganic Non-metal*		
Site Matrix Description	Glass waste consists of discarded labware, windows, containers or raschig rings from various processes.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT	ID 118	**TRUCON CODE**	ID 118

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

00316

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W240

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 813
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	1.6	0.0	13.1
Cellulosics	299.0	51.4	850.0
Rubber	0.0	0.0	0.0
Plastics	1.1	0.0	8.7
Solidified, Inorganic matrix	32.4	3.8	69.9
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	169.1	169.1	m3
End of 1993:	169.1	169.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B
D008A
D009A
F001

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	3.49E-01	Curies/m3
Pu52	1.75E+01	Curies/m3
U235	3.74E-07	Curies/m3

000317

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | **WASTE TYPE** MTRU | **HANDLING** CH | **GENERATOR SITE** RF

WASTE STREAM MWIR ID	IN-W243
WIPP ID	IN-W243
Local ID	ID-EGG-119T-440
MATRIX CODE	5220
SITE FINAL FORM IDC	
STREAM NAME	Glass Debris
DESCRIPTION	Glass (TRU): Glass
Waste Matrix Code Group	Inorganic Non-metal
Site Matrix Description	This waste stream, generated at the Rocky Flats Plant, consists of glass sample vials, bottles, lead-taped sample vials, ion exchange columns, dissolver pyrex laboratory glassware such as pyrex flasks and beakers, glovebox windows (glass, plexiglass, leaded glass), and crushed and ground glass. The waste includes limited amounts of other noncombustibles such as metals, and limited amounts of combustible wastes. No sludges should be present although some glass vials may contain limited amounts of free liquids.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 118; 218B

TRUCON CODE ID 218B

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

IN-W243

CONTAINER: SWB
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 47
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.7	0.0	5.7
Other Inorganic Materials	130.9	22.5	372.2
Cellulosics	0.0	0.0	0.0
Rubber	0.5	0.0	3.8
Plastics	14.2	1.7	30.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	38.8	88.7	m3
End of 1993:	38.8	88.7	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	6.68E-02	Curies/m3
Pu52	6.88E+00	Curies/m3
U235	2.70E-07	Curies/m3
U238	1.87E-08	Curies/m3

TYPICAL EPA CODES APPLICABLE

D002B
D008A
D008C
D029
F001
F002
F003
F005

Comments

47 in numer stored is the number of SWBs that result from overpacking 4 drums/SWB.

000319

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **IN** WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W243 CONTAINER: Drum Container Matl: steel Liner Type: Number Stored: 707

Type/Size: 55-gallon Int. Vol/Ctnr: 0.208 m3 Liner Material: Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	1.6	0.0	13.1
Other Inorganic Materials	299.0	51.4	850.0
Cellulosics	0.0	0.0	0.0
Rubber	1.1	0.0	8.7
Plastics	32.4	3.8	69.9
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

13% of this waste stream volume is classified as RH-TRU without current shielding. It is anticipated that the RH-TRU portion will be shipped as CH-TRU with internal shielding.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	147.0	147.0	m3
End of 1993:	147.0	147.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B
D008A
D008C
D029
F001
F002
F003
F005

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.53E-01	Curies/m3
Pu52	1.57E+01	Curies/m3
U235	6.16E-07	Curies/m3
U238	4.26E-08	Curies/m3

0300030

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM MWIR ID	IN-W245	**STREAM NAME**	Uncategorized Unknown
WIPP ID	IN-W245		
Local ID	ID-EGG-119T-441	**DESCRIPTION**	Glass (TRU): Unleached Rashig Rings
MATRIX CODE	8900		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Inorganic Non-metal		

Site Matrix Description: This waste stream, generated at the Rocky Flats Plant, consists of boronated glass rings used to minimize neutron multiplication in liquid storage tanks. Content code 441, Unleached Rashig Rings was used from 1971-79 as a separate stream, and then combined with content code 442, Leached Rashig Rings. The rings are about 1.75 inches high and 1.5 inch in diameter, with a 0.25 inch wal thickness. The rings are heat and chemical resistant borosilicate glass with 11.8 - 13.8 weight % B203, with an isotopic content of 10B/11B of not less than 0.24. Some of the rings, which had above-discard amounts of plutonium, were leached with nitric acid to recover the plutonium and then rinsed with water, and dried. Some of the rings may be contaminated with small amounts of oil.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 125; 225B

TRUCON CODE ID 225B

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000321

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W245 CONTAINER: SWB
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 54
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	154.6	92.0	194.0
Cellulosics	9.9	5.9	15.6
Rubber	0.0	0.0	0.0
Plastics	3.5	1.4	5.9
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	44.9	102.6	m3
End of 1993:	44.9	102.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	5.35E-03	Curies/m3
Pu52	1.38E+01	Curies/m3

TYPICAL EPA CODES APPLICABLE

D001C
D002B
D008A
D008C
F001

Comments

54 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

000323

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

IN-W245 CONTAINER: Drum | Type/Size: 55-gallon

Container Matl: steel | Int. Vol/Ctnr: 0.208 m3

Liner Type: | Liner Material:

Number Stored: 597 | Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	353.0	210.0	443.0
Cellulosics	22.7	13.5	35.6
Rubber	0.0	0.0	0.0
Plastics	7.9	3.3	13.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

7% of this waste stream volume is classified as RH-TRU without current shielding. It is anticipated that the RH-TRU portion will be shipped as CH-TRU with internal shielding.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	124.1	124.1	m3
End of 1993:	124.1	124.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D001C

D002B

D008A

D008C

F001

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.22E-02	Curies/m3
Pu52	3.16E+01	Curies/m3

000323

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM

MWIR ID IN-W247

WIPP ID IN-W247

Local ID ID-EGG-119T-442

MATRIX CODE 8900

SITE FINAL FORM IDC

STREAM NAME Uncategorized Unknown

DESCRIPTION Glass (TRU): Leached Rashig Rings

Waste Matrix Code Group Inorganic Non-metal

Site Matrix Description This waste stream, generated at the Rocky Flats Plant, consists of boronated glass rings used to minimize neutron multiplication in liquid storage tanks. Content code 441, Unleached Rashig Rings was used from 1971-79 as a separate stream, and then combined with content code 442, Leached Rashig Rings. The rings are about 1.75 inches high and 1.5 inch in diameter, with a 0.25 inch wal thickness. The rings are heat and chemical resistant borosilicate glass with 11.8 - 13.8 weight % B203, with an isotopic content of 10B/11B of not less than 0.24. Some of the rings, which had above-discard amounts of plutonium, were leached with nitric acid to recover the plutonium and then rinsed with water, and dried. Some of the rings may be contaminated with small amounts of oil.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 118; 218A

TRUCON CODE ID 218A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000324

000325

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W247

CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 40
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	86.3	37.8	167.3
Cellulosics	10.3	0.0	11.5
Rubber	0.0	0.0	0.0
Plastics	4.5	1.9	10.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

Comments

40 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	32.9	75.1	m3
End of 1993:	32.9	75.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B
D008A
D028
D029
F001
F002
F003
F005A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.26E-03	Curies/m3
Pu52	6.66E+00	Curies/m3
U235	1.81E-07	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W247 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 801
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	197.0	86.3	382.0
Cellulosics	23.6	0.0	26.2
Rubber	0.0	0.0	0.0
Plastics	10.3	4.4	24.7
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	166.6	166.6	m3
End of 1993:	166.6	166.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	5.17E-03	Curies/m3
Pu52	1.52E+01	Curies/m3
U235	4.11E-07	Curies/m3

TYPICAL EPA CODES APPLICABLE

D002B
D008A
D028
D029
F001
F002
F003
F005A

Comments

6% of this waste stream volume is classified as RH-TRU without current shielding. It is anticipated that the RH-TRU portion will be shipped as CH-TRU with internal shielding.

0003326

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

WASTE STREAM MWIR ID	IN-W249	**STREAM NAME**	Uncategorized Unknown
WIPP ID	IN-W249		
Local ID	ID-EGG-119T-810	**DESCRIPTION**	Glass (TRU): Glass, Flasks, Sample Vials, etc.
MATRIX CODE	8900		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Inorganic Non-metal		
Site Matrix Description	This waste stream, generated at Mound Laboratory, consists mostly of whole and broken glassware and glass sample vials. The majority of the glass is pyrex. Limited amounts of other noncombustibles, material similar to that in content codes 803, 805, 811, and 826 may be present.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000327

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

IN-W249 CONTAINER: SWB
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 0
Number Projected: 1

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.7	0.0	5.7
Other Inorganic Materials	130.9	22.5	372.2
Cellulosics	0.0	0.0	0.0
Rubber	0.5	0.0	3.8
Plastics	14.2	1.7	30.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.8	1.5	m3
End of 1993:	0.8	1.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D009A

D009D

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	2.60E+02	Curies/m3
Pu239	1.87E+00	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** MD

IN-W249 **CONTAINER:** Drum **Type/Size:** 55-gallon

Container Matl: steel **Int. Vol/Ctnr:** 0.208 m3

Liner Type: **Liner Material:**

Number Stored: 10 **Number Projected:** 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	1.6	0.0	13.1
Other Inorganic Materials	299.0	51.4	850.0
Cellulosics	0.0	0.0	0.0
Rubber	1.1	0.0	8.7
Plastics	32.4	3.8	69.9
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	2.0	2.0	m3
End of 1993:	2.0	2.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D009A

D009D

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	5.94E+02	Curies/m3
Pu239	4.28E+00	Curies/m3

029330

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

WASTE STREAM MWIR ID	IN-W250
WIPP ID	IN-W250
Local ID	ID-EGG-120T-123
MATRIX CODE	5311
SITE FINAL FORM IDC	
STREAM NAME	Leaded Gloves/Aprons Debris
DESCRIPTION	Glovebox Gloves (TRU): Leaded Rubber
Waste Matrix Code Group	Combustible
Site Matrix Description	Discarded leaded glovebox gloves and leaded aprons.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 123

TRUCON CODE ID 123

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

0020330

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **IN** WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W250 CONTAINER: SWB overpack Type/Size: Container Matl: steel Int. Vol/Ctnr: 1.9 m3 Liner Type: Liner Material: Number Stored: 22 Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	111.8	24.7	207.8
Other Inorganic Materials	12.6	2.1	31.6
Cellulosics	2.4	0.5	4.4
Rubber	116.6	25.8	216.6
Plastics	7.1	1.6	13.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4.5	10.1	m3
End of 1993:	4.5	10.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008C

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	3.52E-04	Curies/m3
Pu52	2.13E+01	Curies/m3

Comments

22 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

1000331

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W250

CONTAINER:	Drum	Container Matl:	steel	Liner Type:	
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	

Number Stored: 719
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	255.3	56.5	474.5
Other Inorganic Materials	28.8	4.8	72.1
Cellulosics	5.4	1.2	10.1
Rubber	266.2	58.9	494.7
Plastics	16.3	3.6	30.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	45.9	45.9	m3
End of 1993:	45.9	45.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008C

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	8.04E-04	Curies/m3
Pu52	4.86E+01	Curies/m3

000332

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

WASTE STREAM MWIR ID	IN-W252	**STREAM NAME**	Leaded Gloves/Aprons Debris
WIPP ID	IN-W252		
Local ID	ID-EGG-120T-339	**DESCRIPTION**	Glovebox Gloves (TRU): Leaded Rubber Gloves and Aprons
MATRIX CODE	5311		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Combustible		

Site Matrix Description: This waste comes from Rocky Flats Plant. It consists of leaded rubber gloves and aprons. A limited amount of unleaded gloves, lead bricks, and lead sheeting may also be present.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 123; 223A **TRUCON CODE** ID 123; 223A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000333

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W252

CONTAINER:	SWB overpack
Type/Size:	
Container Matl:	steel
Int. Vol/Ctnr:	1.9 m3
Liner Type:	
Liner Material:	
Number Stored:	45
Number Projected:	0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	8.4	2.3	28.2
Cellulosics	1.6	0.0	12.4
Rubber	179.5	116.5	275.4
Plastics	5.3	1.4	19.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	37.2	85.0	m3
End of 1993:	37.2	85.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.13E-01	Curies/m3
Pu52	2.33E+01	Curies/m3

TYPICAL EPA CODES APPLICABLE

D008C
D022
D028
D029
F001
F002
F003
F005A

Comments

45 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

IN-W252

CONTAINER:	Drum	Container Matl:	steel	Liner Type:	
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	

Number Stored: 591
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	19.2	5.2	64.5
Cellulosics	3.7	0.0	28.4
Rubber	410.0	266.0	629.0
Plastics	12.0	3.3	44.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	12.0	123.0	m3
End of 1993:	123.0	123.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.58E-01	Curies/m3
Pu52	5.33E+01	Curies/m3

TYPICAL EPA CODES APPLICABLE

D008C
D022
D028
D029
F001
F002
F003
F005A

Comments

13% of this waste stream volume is classified as RH-TRU without current shielding. It is anticipated that the RH-TRU portion will be shipped as CH-TRU with internal shielding.

53303

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM MWIR ID	IN-W254	**STREAM NAME**	Leaded Gloves/Aprons Debris
WIPP ID	IN-W254		
Local ID	ID-EGG-120T-463	**DESCRIPTION**	Glovebox Gloves (TRU): Leaded Rubber Gloves and Aprons
MATRIX CODE	5311		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Combustible		
Site Matrix Description	This waste comes from Rocky Flats Plant. It consists of leaded rubber gloves and aprons. A limited amount of unleaded gloves, lead bricks, and lead sheeting may also be present.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 223A

TRUCON CODE ID 223A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	*Mixed TRU*	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000336

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W254 CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 3
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	111.8	24.7	207.8
Other Inorganic Materials	12.6	2.1	31.6
Cellulosics	2.4	0.5	4.4
Rubber	116.6	25.8	216.6
Plastics	7.1	1.6	13.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	2.6	5.8	m3
End of 1993:	2.6	5.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008C

F001

F002

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	1.39E+01	Curies/m3

Comments

3 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

4837

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W254

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 35
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	255.3	56.5	474.5
Other Inorganic Materials	28.8	4.8	72.1
Cellulosics	5.4	1.2	10.1
Rubber	266.2	58.9	494.7
Plastics	16.3	3.6	30.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	7.6	7.6	m3
End of 1993:	7.6	7.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	3.18E+01	Curies/m3

TYPICAL EPA CODES APPLICABLE

D008C
F001
F002

Comments

13% of this waste stream volume is classified as RH-TRU without current shielding. It is anticipated that the RH-TRU portion will be shipped as CH-TRU with internal shielding.

00338

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN **WASTE TYPE** MTRU **HANDLING** CH **GENERATOR SITE** MD

WASTE STREAM MWIR ID	IN-W256	**STREAM NAME**	Leaded Gloves/Aprons Debris
WIPP ID	IN-W256		
Local ID	ID-EGG-120T-802	**DESCRIPTION**	Glovebox Gloves (TRU): Dry Box Gloves and O-Rings
MATRIX CODE	5311		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Combustible		
Site Matrix Description	This waste stream is generated at the Mound Laboratory. The waste consists of neoprene dry box (glovebox) gloves, neoprene, O-rings, and lead-lined gloves.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE MD

IN-W256 CONTAINER: SWB overpack
Type/Size:
Container Matl: steel
Int. Vol/Ctnr: 1.9 m3
Liner Type:
Liner Material:
Number Stored: 9
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	111.8	24.7	207.8
Other Inorganic Materials	12.6	2.1	31.6
Cellulosics	2.4	0.5	4.4
Rubber	116.6	25.8	216.6
Plastics	7.1	1.6	13.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	7.2	16.4	m3
End of 1993:	7.2	16.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008C

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.35E-02	Curies/m3
Pu238	4.30E+01	Curies/m3
Pu239	3.07E-01	Curies/m3
Pu240	6.59E-01	Curies/m3

Comments

9 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

IN-W256 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 89
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	255.3	56.5	474.5
Other Inorganic Materials	28.8	4.8	72.1
Cellulosics	5.4	1.2	10.1
Rubber	266.2	58.9	494.7
Plastics	16.3	3.6	30.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	18.5	18.5	m3
End of 1993:	18.5	18.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008C

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	5.36E-02	Curies/m3
Pu238	9.82E+01	Curies/m3
Pu239	7.00E-01	Curies/m3
Pu240	1.50E+00	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** AE

WASTE STREAM

MWIR ID	IN-W259
WIPP ID	IN-W259
Local ID	ID-EGG-144T-104
MATRIX CODE	5400
SITE FINAL FORM IDC	
STREAM NAME	Heterogeneous Debris
DESCRIPTION	Radioactive Sources (TRU): Alpha Hot Cell Waste
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	This waste stream, generated at Argonne National Laboratory-East, contains alpha hot cell waste. Noncombustible and combustible waste are segregated. Combustible wastes include: paper, plastic and PVC containers, rubber O-rings and gloves, rags, and Q-tips. Noncombustible wastes include: lab equipment, tools, fixtures, glassware, pipe, tubing, fitting, fastners, firebrick, ferrous and nonferrous metal scraps and parts, and small electric motors. 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 pelletized clay, and ?? to ferrour or ferric salts.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE AE

IN-W259 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 283
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1634.6
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.1	0.0	22.7
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.3	0.0	16.4
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	58.8	58.8	m3
End of 1993:	58.8	58.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	2.45E-01	Curies/m3
Pu240	2.71E-02	Curies/m3
U235	6.09E-05	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE BT

WASTE STREAM

MWIR ID	IN-W260A
WIPP ID	IN-W260A
Local ID	ID-EGG-144T-040
MATRIX CODE	3100
SITE FINAL FORM IDC	
STREAM NAME	Inorganic Process Residues
DESCRIPTION	Radioactive Sources (TRU): Solid Binary Scrap Powder, Etc.
Waste Matrix Code Group	Uncategorized Metal
Site Matrix Description	This waste stream, generated at Bettis Atomic Power Laboratory, contains solid binary scrap as powder, pellets, or rods. The material is made of ceramic based U02 and Th02. Some kilorods or fuel rods constructed of fuel pellets within hollow zirconium tubes are also included.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

440003

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** BT

IN-W260A **CONTAINER:** SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 3
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	112.2	112.2	112.2
Aluminum-Based Metals/Alloys	12.2	12.2	12.2
Other Metals	10.8	10.8	10.8
Other Inorganic Materials	12.8	1.0	12.8
Cellulosics	3.2	0.0	19.8
Rubber	0.0	0.0	0.0
Plastics	6.6	0.0	29.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	2.5	5.6	m3
End of 1993:	2.5	5.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

3 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

Isotopic composition is unknown for this waste stream.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE BT

IN-W260A CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 30
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	256.1	256.1	256.1
Aluminum-Based Metals/Alloys	27.8	27.8	27.8
Other Metals	24.7	24.7	24.7
Other Inorganic Materials	29.3	2.3	29.3
Cellulosics	7.4	0.0	45.3
Rubber	0.0	0.0	0.0
Plastics	15.1	0.0	67.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	6.3	6.3	m3
End of 1993:	6.3	6.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide Activity

Comments

Isotopic composition is unknown for this waste stream.

04003345

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** RH **GENERATOR SITE** BT

WASTE STREAM

MWIR ID	IN-W260B
WIPP ID	IN-W260B
Local ID	ID-EGG-144T-040
MATRIX CODE	3100
SITE FINAL FORM IDC	

STREAM NAME Inorganic Process Residues

DESCRIPTION Radioactive Sources (TRU): Solid Binary Scrap Powder, Etc.

Waste Matrix Code Group Uncategorized Metal

Site Matrix Description This waste stream, generated at Bettis Atomic Power Laboratory, contains solid binary scrap as powder, pellets, or rods. The material is made of ceramic based U02 and Th02. Some kilorods or fuel rods constructed of fuel pellets within hollow zirconium tubes are also included.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING RH GENERATOR SITE BT

IN-W260B

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 11
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	256.1	256.1	256.1
Aluminum-Based Metals/Alloys	27.8	27.8	27.8
Other Metals	24.7	24.7	24.7
Other Inorganic Materials	29.3	2.3	29.3
Cellulosics	7.4	0.0	45.3
Rubber	0.0	0.0	0.0
Plastics	15.1	0.0	67.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	2.2	2.2	m3
End of 1993:	2.2	2.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Isotopic composition is unknown for this waste stream.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

WASTE STREAM

MWIR ID	IN-W263
WIPP ID	IN-W263
Local ID	ID-EGG-141T-842
MATRIX CODE	4200
SITE FINAL FORM IDC	

STREAM NAME Contaminated Soils/Debris

DESCRIPTION Particulate Wastes (TRU): Contaminated Soil

Waste Matrix Code Group: Soils

Site Matrix Description: This waste, generated at Mound Laboratories,consists of soils, 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.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X
Non-Defense TRU Waste	
Commercial TRU Waste	
Unknown	

Mixed TRU	X
Non-Mixed TRU	
Suspect Mixed TRU	
Unknown	

Rsearch and Devel. Waste	X
Operations Waste	X
Residues	
Decon and Decommissioning	X
Environmental Restoration	
From Treatment of Waste	
Maintenance	

TSCA	
Asbestos	
PCBs	
Other	
N/A	X
Unknown	

040343

000350

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

IN-W263

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 19
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.1	0.0	0.1
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	6.4	4.6	33.9
Cellulosics	19.0	0.0	19.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	613.0	457.4	671.5
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3.8	3.8	m3
End of 1993:	3.8	3.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B
D003E
D006A
D007A
D008A
D009A
D010A
D011A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	4.20E-01	Curies/m3
Pu239	2.54E-02	Curies/m3
Pu83	1.33E-01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID	IN-W265
WIPP ID	IN-W265
Local ID	ID-EGG-141T-374
MATRIX CODE	S430
SITE FINAL FORM IDC	
STREAM NAME	Predominately Inorganic Non-metal Debris
DESCRIPTION	Particulate Wastes (TRU): Blacktop, Concrete, Dirt and Sand
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	This waste contains blacktop, concrete, reinforced concrete, cinderblocks, bricks, dirt and sand. Limited amounts of waste may be damp. A limited amount may contain combustibles such as coveralls and gloves. The waste is generated from cleanup of spills and leaks, process changes, maintenance, and D&D operations. Portland cement is added to containers that contain wet or damp waste.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 121

TRUCON CODE ID 121

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

135351

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W265

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 230
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	447.0	8.7	1442.3
Cellulosics	0.0	0.0	12.0
Rubber	0.0	0.0	0.0
Plastics	24.0	12.0	24.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	49.0	9.6	144.2
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	47.8	47.8	m3
End of 1993:	47.8	47.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

F001

F002

F003

F004

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	9.67E-03	Curies/m3
Pu52	7.53E+00	Curies/m3
U235	4.98E-07	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** IN, AW

WASTE STREAM	**MWIR ID**	IN-W269A	
	WIPP ID	IN-W269A	
	Local ID	ID-EGG-141T-150	
MATRIX CODE		5000	
SITE FINAL FORM IDC			

STREAM NAME Debris Waste

DESCRIPTION Particulate Wastes (TRU): Laboratory Waste

Waste Matrix Code Group Heterogeneous

Site Matrix Description This waste stream, generated at Idaho National Engineering Laboratory, contains laboratory waste from ANL-W including fluxwire, fission counters, HEDL samples, analytical samples dissolved and absorbed on Oil-Dri, glassware, vials, miscellaneous waste from gloveboxes, dissolved pellets absorbed on Oil-Dri, enriched and normal U308 pellets, aluminum foil and capsules, TREAT waste capsules, chlorinated ion exchange resins, Pu sources, and irradiated GE ca??. Lab waste from ICPP includes Kimwipes, trash, glassware, dissolved camples absorbed in Oil-Dri, analytical samples, gloves, etc.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

003353

1453000

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE IN, AW

IN-W269A CONTAINER: SWB overpack
Type/Size:

Container Mat'l: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 9
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	42.1	0.0	715.8
Aluminum-Based Metals/Alloys	0.0	0.0	0.7
Other Metals	0.0	0.0	9.9
Other Inorganic Materials	1.1	0.0	10.5
Cellulosics	35.4	0.0	80.9
Rubber	3.2	0.0	7.2
Plastics	28.4	0.0	65.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	7.2	16.4	m3
End of 1993:	7.2	16.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.51E+00	Curies/m3
Pu238	2.92E+00	Curies/m3
Pu239	2.57E+01	Curies/m3
Pu240	2.66E+00	Curies/m3
Pu242	8.72E-06	Curies/m3
Pu52	1.19E-01	Curies/m3
U235	4.45E-03	Curies/m3
U238	2.74E-05	Curies/m3

Comments

9 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** IN, AW

IN-W269A **CONTAINER:** Drum **Type/Size:** 55-gallon

Container Matl: **Int. Vol/Ctnr:** 0.208 m3

Liner Type: steel **Liner Material:**

Number Stored: 89 **Number Projected:** 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1634.6
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.1	0.0	22.7
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.3	0.0	16.4
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	18.4	18.4	m3
End of 1993:	18.4	18.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	5.73E+00	Curies/m3
Pu238	6.66E+00	Curies/m3
Pu239	5.86E+01	Curies/m3
Pu240	6.07E+00	Curies/m3
Pu242	1.99E-05	Curies/m3
Pu52	2.71E-01	Curies/m3
U235	1.02E-02	Curies/m3
U238	6.25E-05	Curies/m3

00355

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU   HANDLING RH   GENERATOR SITE IN, AW

WASTE STREAM

MWIR ID: IN-W269B
WIPP ID: IN-W269B
Local ID: ID-EGG-141T-150

STREAM NAME: Debris Waste

DESCRIPTION: Particulate Wastes (TRU): Laboratory Waste

MATRIX CODE:

SITE FINAL FORM IDC:

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: This waste stream, generated at Idaho National Engineering Laboratory, contains laboratory waste from ANL-W including fluxwire, fission counters, HEDL samples, analytical samples dissolved and absorbed on Oil-Dri, glassware, vials, miscellaneous waste from gloveboxes, dissolved pellets absorbed on Oil-Dri, enriched and normal U308 pellets, aluminum foil and capsules, TREAT waste capsules, chlorinated ion exchange resins, Pu sources, and irradiated GE ca??. Lab waste from ICPP includes Kimwipes, trash, glassware, dissolved camples absorbed in Oil-Dri, analytical samples, gloves, etc.

NO MIGRATION VARIANCE PETITION ASSIGNMENT:

TRUCON CODE:

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000356

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING RH GENERATOR SITE IN, AW

IN-W269B CONTAINER: Drum Type/Size: 55-gallon

Container Mat'l: steel Int. Vol/Ctnr: 0.208 m3

Liner Type: Liner Material:

Number Stored: 1 Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1634.6
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.1	0.0	22.7
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.3	0.0	16.4
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.3	0.3	m3
End of 1993:	0.3	0.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	5.73E+00	Curies/m3
Pu238	6.66E+00	Curies/m3
Pu239	5.86E+01	Curies/m3
Pu240	6.07E+00	Curies/m3
Pu242	1.99E-05	Curies/m3
Pu52	2.71E-01	Curies/m3
U235	1.02E-02	Curies/m3
U238	6.25E-05	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

WASTE STREAM MWIR ID	IN-W271	**STREAM NAME**	Uncategorized Inorganic Process Residues
WIPP ID	IN-W271		
Local ID	ID-EGG-137T-814	**DESCRIPTION**	Nonmetal Molds and Crucibles (TRU): Contaminated Mercury or Graphite Crucibles
MATRIX CODE	3190		
SITE FINAL FORM IDC			

Waste Matrix Code Group Heterogeneous

Site Matrix Description This waste stream was generated at Mound Laboratory. The records at Mound Laboratory and in the INEL-TCWCIS do not agree on the content. The waste most likely is graphite crucibles and electrodes, with some containers of liquid mercury.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

IN-W271 CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type:
Liner Material:
Number Stored: 2
Number Projected: 0

0003051

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	415.6	2.2	764.4
Aluminum-Based Metals/Alloys	17.5	17.5	38.2
Other Metals	9.2	9.2	46.6
Other Inorganic Materials	31.7	0.0	812.5
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	4.8	0.0	4.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.4	m3
End of 1993:	0.4	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D009B
D009D

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	1.63E+01	Curies/m3
Pu240	3.75E+01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM MWIR ID	IN-W272	**STREAM NAME**	Debris Waste
WIPP ID	IN-W272		
Local ID	ID-EGG-137T-312	**DESCRIPTION**	Nonmetal Molds and Crucibles (TRU): Coarse Graphite
MATRIX CODE	5000		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Graphite		
Site Matrix Description	Coarse graphite chunks.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 115 **TRUCON CODE** ID 115

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000360

019391

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W272 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 9
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	187.0	162.0	211.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	41.8	32.2	51.4
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.9	1.9	m3
End of 1993:	1.9	1.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

F001

F002

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	1.76E+02	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM	MWIR ID	IN-W275
	WIPP ID	IN-W275
	Local ID	ID-EGG-137T-301
MATRIX CODE		5000
SITE FINAL FORM IDC		

STREAM NAME: Debris Waste

DESCRIPTION: Nonmetal Molds and Crucibles (TRU): Graphite Cores

Waste Matrix Code Group: Graphite

Site Matrix Description: This waste stream, generated at the Rocky Flats Plant, is similar to graphite molds, content code 300. A graphite core is part of the shaped graphite mold to cast plutonium metal. Some graphite molds are also included in this content code. This content code has not been used since 1977. The graphite has broken into pieces, and some of the graphite has been scarfed or wire brushed to remove any above-discard deposits of plutonium

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000363

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W275 CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 2
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.1	0.1	0.1
Other Inorganic Materials	138.4	138.4	138.4
Cellulosics	3.6	3.6	3.6
Rubber	0.0	0.0	0.0
Plastics	5.5	5.5	5.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.8	4.1	m3
End of 1993:	1.8	4.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

F001

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.38E-02	Curies/m3
Pu52	1.51E+01	Curies/m3

Comments

2 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W275 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 22
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.3	0.3	0.3
Other Inorganic Materials	316.0	316.0	316.0
Cellulosics	8.2	8.2	8.2
Rubber	0.0	0.0	0.0
Plastics	12.6	12.6	12.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4.6	4.6	m3
End of 1993:	4.6	4.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

F001

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	5.42E-02	Curies/m3
Pu52	3.45E+01	Curies/m3

000364

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM

MWIR ID	IN-W276
WIPP ID	IN-W276
Local ID	ID-EGG-137T-300
MATRIX CODE	5000
SITE FINAL FORM IDC	

STREAM NAME Debris Waste

DESCRIPTION Nonmetal Molds and Crucibles (TRU): Graphite

Waste Matrix Code Group Graphite

Site Matrix Description This waste stream, generated at the Rocky Flats Plant, consists of graphite molds used in casting plutonium metal. The waste may also include small amounts of surgical gloves. The graphite is in the form of broken mold pieces. Some of the graphite has been scarfed or wire-brushed to remove above-discard deposits of plutonium.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 115; 215A

TRUCON CODE ID 215A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X
Non-Defense TRU Waste	
Commercial TRU Waste	
Unknown	

Mixed TRU	X
Non-Mixed TRU	
Suspect Mixed TRU	
Unknown	

Rsearch and Devel. Waste	X
Operations Waste	X
Residues	
Decon and Decommissioning	X
Environmental Restoration	
From Treatment of Waste	
Maintenance	

TSCA	
Asbestos	
PCBs	
Other	
N/A	X
Unknown	

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W276 CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 132
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	133.6	67.9	204.9
Cellulosics	2.9	0.0	4.3
Rubber	0.0	0.0	0.0
Plastics	3.3	1.4	4.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

Comments

132 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	109.7	250.5	m3
End of 1993:	109.7	250.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D022
D028
F001
F002
F003
F005A
F005A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	6.35E-02	Curies/m3
Pu52	1.23E+01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

IN-W276

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 1356
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	305.0	155.0	468.0
Cellulosics	6.7	0.0	9.8
Rubber	0.0	0.0	0.0
Plastics	7.4	3.3	10.9
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	282.0	282.0	m3
End of 1993:	282.0	282.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D022
D028
F001
F002
F003
F005A
F005A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.45E-01	Curies/m3
Pu52	2.82E+01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** MD

WASTE STREAM MWIR ID IN-W280
WIPP ID IN-W280
Local ID ID-EGG-132T-803

MATRIX CODE 5100

SITE FINAL FORM IDC

STREAM NAME Metal Debris

DESCRIPTION Metals (TRU): Metal, Equipment, Pipes, Valves, Etc.

Waste Matrix Code Group Uncategorized Metal

Site Matrix Description This waste comes from Mound Laboratory. It consists of stainless steel, carbon steel, and small amounts of aluminum-metal wastes in the form of valves, piping, wrenches, nuts, bolts, stainless steel tubing, spatulas, pans, hotplates, ringstands, etc. Limited amounts of combustible and noncombustible waste also present from content codes 810, 811, 812, 813, 814, 826, and 832. Content code 812 is spent ion-exchange resin and content code 832 is containers of liquid mercury. Most of the waste is metal waste that is primarily from D&D operations. Some of the metals were leached with nitric acid, ultrasonically cleaned and dried to remove above-discard amounts of plutonium.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

890368

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE MD

IN-W280 CONTAINER: SWB overpack Type/Size:

Container Mat'l: steel | Int. Vol/Ctnr: 1.9 m3 | Liner Type: | Liner Material:

Number Stored: 12 | Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	182.0	1.0	334.7
Aluminum-Based Metals/Alloys	7.7	7.7	16.7
Other Metals	4.0	4.0	20.4
Other Inorganic Materials	13.9	0.0	355.8
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	2.1	0.0	2.1
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	9.9	22.6	m3
End of 1993:	9.9	22.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D009A

D009D

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	4.03E-03	Curies/m3
Pu238	2.84E+02	Curies/m3
Pu239	1.97E+00	Curies/m3
Pu83	1.15E+01	Curies/m3

Comments

12 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

IN-W280 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 123
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	415.6	2.2	764.4
Aluminum-Based Metals/Alloys	17.5	17.5	38.2
Other Metals	9.2	9.2	46.6
Other Inorganic Materials	31.7	0.0	812.5
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	4.8	0.0	4.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	25.6	25.6	m3
End of 1993:	25.6	25.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D009A

D009D

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	9.21E-03	Curies/m3
Pu238	6.49E+02	Curies/m3
Pu239	4.50E+00	Curies/m3
Pu83	2.63E+01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

WASTE STREAM MWIR ID	IN-W281	**STREAM NAME**	Heterogeneous Debris
WIPP ID	IN-W281		
Local ID	ID-EGG-134T-824	**DESCRIPTION**	Miscellaneous (Paper, Metal, Etc.) (TRU): Noncombustible Equipment Boxes
MATRIX CODE	5400		
SITE FINAL FORM IDC			

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: This waste stream, generated at the Mound Laboratory, consists of large, noncombustible wastes such as tanks (stainless steel and tantalum), piping, ducts, conduit, electric motors, pumps, metallurgical presses, lathes, dissolvers, evaporators, furnaces, ladders, vacuum sweepers, 24 x 24 x 12 inch HEPA filters, fume hoods, gloveboxes, plexiglass glovebox windows, and floor tile. Limited amounts of combustible wastes (plastic tanks, fiberglass gloveboxes, plastic contamination control tents, etc.) are also included.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

IN-W281

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 1672
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	682.0	2.2	764.4
Aluminum-Based Metals/Alloys	28.7	17.5	38.2
Other Metals	15.1	9.2	46.6
Other Inorganic Materials	24.9	0.0	812.5
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	4.8	0.0	4.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	348.0	348.0	m3
End of 1993:	348.0	348.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D005A
D006A
D007A
D008A
D009A
D010A
D011A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.51E+01	Curies/m3
Pu239	7.38E-02	Curies/m3
Pu83	1.26E-01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM

MWIR ID	IN-W283
WIPP ID	IN-W283
Local ID	ID-EGG-134T-241
MATRIX CODE	5400
SITE FINAL FORM IDC	
Waste Matrix Code Group	Heterogeneous

STREAM NAME Heterogeneous Debris

DESCRIPTION Miscellaneous (Paper, Metal, Etc.) (TRU): Americium Process Residue

Site Matrix Description This waste stream, generated at the Rocky Flats Plant, consists of piping, flanges, valves, tools, equipment, PVC piping, glassware (flasks, broken ion exchange columns, etc.), glass filters, PE bottles, leaded glovebox gloves, paper, and plastics. Wastes were shipped only in 1972 and 1973, from renovations of the americium recovery line. Some of the containers are lead-lined.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 125; 225A

TRUCON CODE ID 225A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X
Non-Defense TRU Waste	
Commercial TRU Waste	
Unknown	

Mixed TRU	X
Non-Mixed TRU	
Suspect Mixed TRU	
Unknown	

Rsearch and Devel. Waste	X
Operations Waste	X
Residues	
Decon and Decommissioning	X
Environmental Restoration	
From Treatment of Waste	
Maintenance	

TSCA	
Asbestos	
PCBs	
Other	
N/A	X
Unknown	

000373

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W283 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 5
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	159.0	159.0	159.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	129.0	129.0	129.0
Cellulosics	13.5	13.5	13.5
Rubber	0.0	0.0	0.0
Plastics	81.9	81.9	81.9
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.0	1.0	m3
End of 1993:	1.0	1.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D001C
D002B
D008C
F002
F003

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	5.98E+01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** BC

WASTE STREAM

MWIR ID	IN-W285
WIPP ID	IN-W285
Local ID	ID-EGG-134T-201
MATRIX CODE	5400
SITE FINAL FORM IDC	

STREAM NAME Heterogeneous Debris

DESCRIPTION Miscellaneous (Paper, Metal, Etc.) (TRU): Noncombustible Solids

Waste Matrix Code Group Heterogeneous

Site Matrix Description *This waste stream, generated at Battelle Columbus Laboratories, contains noncombustible items such as tools, crucibles, piping, valves, pieces of equipment, lead bricks, plexiglass, and filters.*

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X
Non-Defense TRU Waste	
Commercial TRU Waste	
Unknown	

Mixed TRU	X
Non-Mixed TRU	
Suspect Mixed TRU	
Unknown	

Rsearch and Devel. Waste	X
Operations Waste	X
Residues	
Decon and Decommissioning	X
Environmental Restoration	
From Treatment of Waste	
Maintenance	

TSCA		
	Asbestos	
	PCBs	
	Other	
	N/A	X
	Unknown	

57500

0003370

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE BC

IN-W285

CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 19
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	42.1	0.0	715.8
Aluminum-Based Metals/Alloys	0.0	0.0	0.7
Other Metals	0.0	0.0	9.9
Other Inorganic Materials	1.1	0.0	10.5
Cellulosics	35.4	0.0	80.9
Rubber	3.2	0.0	7.2
Plastics	28.4	0.0	65.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	15.6	35.7	m3
End of 1993:	15.6	35.7	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008C

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	1.26E-01	Curies/m3
U235	4.25E-05	Curies/m3

Comments

19 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE BC

IN-W285 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 237
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1634.6
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.1	0.0	22.7
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.3	0.0	16.4
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	49.3	49.3	m3
End of 1993:	49.3	49.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008C

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	2.87E-01	Curies/m3
U235	9.70E-05	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU   HANDLING CH   GENERATOR SITE AE

WASTE STREAM	MWIR ID	IN-W287	
	WIPP ID	IN-W287	
	Local ID	ID-EGG-134T-101	
MATRIX CODE		5100	
SITE FINAL FORM IDC			

STREAM NAME Metal Debris

DESCRIPTION Miscellaneous (Paper, Metal, Etc.) (TRU): Cut Up Gloveboxes

Waste Matrix Code Group Uncategorized Metal

Site Matrix Description This waste stream, generated at Argonne National Laboratory-East, contains glovebox sections and associated equipment from decontamination and decommissioning operations. The waste is predominantly noncombustible. There may be some lead (EP toxic, waste code D008) present.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

C4C970

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE AE

IN-W287 CONTAINER: Drum
Type/Size: 55-gallon

Container Mat'l: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 1019
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	213.2	44.2	368.4
Aluminum-Based Metals/Alloys	34.2	27.4	73.7
Other Metals	15.8	12.6	44.2
Other Inorganic Materials	38.9	0.0	141.1
Cellulosics	56.8	23.7	115.0
Rubber	0.6	0.3	2.4
Plastics	5.7	2.4	24.2
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	212.0	212.0	m3
End of 1993:	212.0	212.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008A
D008C

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.99E-03	Curies/m3
Np237	7.89E-04	Curies/m3
Pu239	2.58E-01	Curies/m3
Pu240	3.07E+00	Curies/m3
Pu241	2.85E-01	Curies/m3
U235	1.24E-08	Curies/m3
U238	5.91E-05	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF, AE

WASTE STREAM
MWIR ID: IN-W289
WIPP ID: IN-W289
Local ID: ID-EGG-134T-121

STREAM NAME Unknown Solids

DESCRIPTION Miscellaneous (Paper, Metal, Etc.) (TRU): DDW Noncombustible Solids

MATRIX CODE 8200

SITE FINAL FORM IDC

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: This waste is generated at Argonne National Laboratory-East and Rocky Flats Plant. The waste is derived from decontamination and disposal of facilities and ancillary systems. The composition of the waste is unknown.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X
Non-Defense TRU Waste	
Commercial TRU Waste	
Unknown	

Mixed TRU	X
Non-Mixed TRU	
Suspect Mixed TRU	
Unknown	

Rsearch and Devel. Waste	X
Operations Waste	X
Residues	
Decon and Decommissioning	X
Environmental Restoration	
From Treatment of Waste	
Maintenance	

TSCA	
Asbestos	
PCBs	
Other	
N/A	X
Unknown	

00030

000381

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF, AE

IN-W289 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 122
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	415.6	2.2	764.4
Aluminum-Based Metals/Alloys	17.5	17.5	38.2
Other Metals	9.2	9.2	46.6
Other Inorganic Materials	31.7	0.0	812.5
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	4.8	0.0	4.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	25.4	25.4	m3
End of 1993:	25.4	25.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D004A
D005A
D006A
D007A
D008A
D009A
F001
F002
P015

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	4.67E-01	Curies/m3
Pu239	5.90E+00	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** AE

WASTE STREAM

MWIR ID	IN-W291
WIPP ID	IN-W291
Local ID	ID-EGG-134T-100
MATRIX CODE	5000
SITE FINAL FORM IDC	
Waste Matrix Code Group	Heterogeneous

STREAM NAME Debris Waste

DESCRIPTION Miscellaneous (Paper, Metal, Etc.) (TRU): General Plant Waste

Site Matrix Description This waste stream, generated at Argonne National Laboratory-East, contains combustible and noncombustible items such as paper, rags, rubber gloves, plastic bottles, glassware, small tools, balances, and empty metal cans. The waste is usually separated into combustible and noncombustible streams. Prior to 1977 small amounts of absorbed organic wastes are included.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000383

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE AE

IN-W291 CONTAINER: Drum Type/Size: 55-gallon

Container Mat'l: steel Int. Vol/Ctnr: 0.208 m3

Liner Type: Liner Material:

Number Stored: 3073 Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1634.6
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.1	0.0	22.7
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.3	0.0	16.4
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	639.0	639.0	m3
End of 1993:	639.0	639.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D001C

F003

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	5.23E-01	Curies/m3
Np237	7.16E-05	Curies/m3
Pu239	2.17E-01	Curies/m3
Pu240	9.73E-01	Curies/m3
U235	2.43E-07	Curies/m3
U238	9.62E-07	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM

MWIR ID	IN-W294
WIPP ID	IN-W294
Local ID	ID-EGG-132T-481
MATRIX CODE	5100
SITE FINAL FORM IDC	
STREAM NAME	Metal Debris
DESCRIPTION	Metals (TRU): Leached Non Special Source Metal
Waste Matrix Code Group	Uncategorized Metal
Site Matrix Description	This waste comes from the Rocky Flats Plant. It consists of the smaller pieces of the waste described under content code 480 that have been washed with water to recover plutonium.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 217C

TRUCON CODE ID 217C

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

1600384

00038653

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W294 CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 47
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	70.9	0.0	148.5
Aluminum-Based Metals/Alloys	4.2	0.0	21.1
Other Metals	53.4	0.0	208.9
Other Inorganic Materials	13.9	5.7	23.9
Cellulosics	0.0	0.0	0.1
Rubber	0.0	0.0	0.0
Plastics	7.2	1.9	17.2
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

Comments

47 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	38.5	87.9	m3
End of 1993:	38.5	87.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008A
D008C
D022
F001
F002
F005

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	3.30E-02	Curies/m3
Pu52	1.01E+01	Curies/m3
U235	8.82E-07	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

IN-W294

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type:
Liner Material:
Number Stored: 1946
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	162.0	0.0	339.0
Aluminum-Based Metals/Alloys	9.6	0.0	48.1
Other Metals	122.0	0.0	477.0
Other Inorganic Materials	31.7	13.1	54.6
Cellulosics	0.0	0.0	0.2
Rubber	0.0	0.0	0.0
Plastics	16.4	4.4	39.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	404.8	404.8	m3
End of 1993:	404.8	404.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	7.53E-02	Curies/m3
Pu52	2.31E+01	Curies/m3
U235	2.02E-06	Curies/m3

TYPICAL EPA CODES APPLICABLE

D008A
D008C
D022
F001
F002
F005

Comments

5% of this waste stream volume is classified as RH-TRU without current shielding. It is anticipated that the RH-TRU portion will be shipped as CH-TRU with internal shielding.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM MWIR ID	IN-W296	**STREAM NAME**	Metal Debris
WIPP ID	IN-W296		
Local ID	ID-EGG-132T-480	**DESCRIPTION**	Metals (TRU): Non Special Source Metal
MATRIX CODE	5100		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Uncategorized Metal		

Site Matrix Description: The waste comes from Rocky Flats Plant. It consists of nonline- and line-generated wastes. The waste may be in the form of gloveboxes, glovebox windows, furnaces, lathes, drill presses, ducting, piping, angle iron, tanks, downdraft tables, part carriers, respirator filters, ultrasonic cleaners, control panels, electronic instrumentation, vacuum sweepers, pumps, motors, railing stairs, metal racks and trays, hotplates, empty metal produce and paint cans, carts, power tools (saws, drills, etc.), hand tools (wrenches, hammers, saws, chisels, guages, etc.), chairs, desks, tables, typewriters, filing cabinets, crushed 55-gallon drums, etc. The waste may also include limited amounts of combustible waste.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 117; 217C

TRUCON CODE ID 217C

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

48387

000388

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

IN-W296

CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 62
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	25.7	0.0	116.5
Aluminum-Based Metals/Alloys	1.7	0.0	14.4
Other Metals	70.1	0.0	235.6
Other Inorganic Materials	8.2	0.0	26.1
Cellulosics	1.7	0.0	7.2
Rubber	0.8	0.0	4.3
Plastics	11.5	1.9	21.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	51.4	117.3	m3
End of 1993:	51.4	117.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.11E-02	Curies/m3
Np237	1.34E-06	Curies/m3
Pu52	2.35E+00	Curies/m3
U235	4.89E-08	Curies/m3

TYPICAL EPA CODES APPLICABLE

D008A
D008C
D028
D029
F001
F002
F003
F005A
F005A

Comments

62 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN   WASTE TYPE MTRU   HANDLING CH   GENERATOR SITE RF

IN-W296   CONTAINER: Drum   Type/Size: 55-gallon   Container Matl: steel   Int. Vol/Ctnr: 0.208 m3   Liner Type: Liner Material: Number Stored: 22443   Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	58.7	0.0	266.0
Aluminum-Based Metals/Alloys	3.9	0.0	32.8
Other Metals	160.0	0.0	538.0
Other Inorganic Materials	18.8	0.0	59.5
Cellulosics	3.9	0.0	16.4
Rubber	1.8	0.0	9.8
Plastics	26.3	4.4	49.2
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

5% of this waste stream volume is classified as RH-TRU without current shielding. It is anticipated that the RH-TRU portion will be shipped as CH-TRU with internal shielding.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4668.1	4668.1	m3
End of 1993:	4668.1	4668.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008A
D008C
D028
D029
F001
F002
F003
F005A
F005A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.54E-02	Curies/m3
Np237	3.07E-06	Curies/m3
Pu52	5.36E+00	Curies/m3
U235	1.12E-07	Curies/m3

680039

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

WASTE STREAM
MWIR ID IN-W298
WIPP ID IN-W298
Local ID ID-EGG-132T-320

STREAM NAME Metal Debris

DESCRIPTION Metals (TRU): Tantalum

MATRIX CODE 5100

SITE FINAL FORM IDC

Waste Matrix Code Group: Uncategorized Metal

Site Matrix Description: This waste comes from the Rocky Flats Plant. It consists of used tantalum crucibles, funnels, funnel inserts, and pour rods.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 117; 217B

TRUCON CODE ID 117

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

IN-W298

CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 22
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	81.0	0.0	172.1
Aluminum-Based Metals/Alloys	2.8	0.0	10.0
Other Metals	17.8	0.0	87.6
Other Inorganic Materials	9.2	0.0	21.5
Cellulosics	6.0	0.0	26.8
Rubber	0.6	0.0	4.0
Plastics	6.0	0.0	8.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	18.2	41.5	m3
End of 1993:	18.2	41.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	5.27E-01	Curies/m3
Pu52	3.88E+01	Curies/m3

TYPICAL EPA CODES APPLICABLE

D008A
D008C
F001
F002

Comments

22 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W298 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 271
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	185.0	0.0	393.0
Aluminum-Based Metals/Alloys	6.3	0.0	22.9
Other Metals	40.7	0.0	200.0
Other Inorganic Materials	20.9	0.0	49.2
Cellulosics	13.7	0.0	61.2
Rubber	1.4	0.0	9.2
Plastics	13.6	0.0	20.1
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	56.4	56.4	m3
End of 1993:	56.4	56.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.20E+00	Curies/m3
Pu52	8.86E+01	Curies/m3

TYPICAL EPA CODES APPLICABLE

D008A
D008C
F001
F002

Comments

7% of this waste stream volume is classified as RH-TRU without current shielding. It is anticipated that the RH-TRU portion will be shipped as CH-TRU with internal shielding.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM MWIR ID: IN-W300
WIPP ID: IN-W300
Local ID: ID-EGG-132T-117

STREAM NAME Metal Debris

MATRIX CODE 5100

SITE FINAL FORM IDC

DESCRIPTION Metals (TRU): Metal Waste

Waste Matrix Code Group Uncategorized Metal

Site Matrix Description Discarded metal.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 117

TRUCON CODE ID 117

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000393

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W300

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 7276
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	256.1	256.1	256.1
Aluminum-Based Metals/Alloys	27.8	27.8	27.8
Other Metals	24.7	24.7	24.7
Other Inorganic Materials	29.3	2.3	29.3
Cellulosics	7.4	0.0	45.3
Rubber	0.0	0.0	0.0
Plastics	15.1	0.0	67.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1513.0	1513.0	m3
End of 1993:	1513.0	1513.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008A
D008C
F001
F002
P015

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.22E-01	Curies/m3
Pu52	1.29E+01	Curies/m3
U235	3.58E-07	Curies/m3
U238	4.45E-10	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE BT

WASTE STREAM

MWIR ID	IN-W302
WIPP ID	IN-W302
Local ID	ID-EGG-132T-020
MATRIX CODE	8200
SITE FINAL FORM IDC	
STREAM NAME	Unknown Solids
DESCRIPTION	Metals (TRU): Noncompressible, Noncombustible
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	This waste stream, generated at Bettis Atomic Power Laboratory, contains noncompressible and noncombustible items such as absolute filters, solidified chemical waste, contaminated metal equipment, furnace brick, and highly contaminated glovebox equipment. Metal scrap could include bars, sheet, fixtures, small equipment tools, etc. made of carbon steel, stainless steel, inconnel, aluminum, copper, brass and zirconium. Chemical wastes include spent chemical solutions and associated solids from the isotope and isotopic dilution analysis of nuclear fuel specimens. The residues were neutralized before being either mixed with absorbent material or solidified.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

560095

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **IN**

WASTE TYPE MTRU HANDLING CH GENERATOR SITE BT

IN-W302

CONTAINER:	SWB overpack
Type/Size:	
Container Matl:	steel
Int. Vol/Ctnr:	1.9 m3
Liner Type:	
Liner Material:	
Number Stored:	36
Number Projected:	0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	42.1	0.0	715.8
Aluminum-Based Metals/Alloys	0.0	0.0	0.7
Other Metals	0.0	0.0	9.9
Other Inorganic Materials	1.1	0.0	10.5
Cellulosics	35.4	0.0	80.9
Rubber	3.2	0.0	7.2
Plastics	28.4	0.0	65.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	29.7	67.8	m3
End of 1993:	29.7	67.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	3.46E+00	Curies/m3
Pu239	6.24E-01	Curies/m3
U233	5.82E-01	Curies/m3

TYPICAL EPA CODES APPLICABLE

D002B

F001

F002

Comments

36 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE BT

IN-W302 CONTAINER: Drum Type/Size: 55-gallon

Container Matl: steel Int. Vol/Ctnr: 0.208 m3

Liner Type: Liner Material:

Number Stored: 367 Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1634.6
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.1	0.0	22.7
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.3	0.0	16.4
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	76.3	76.3	m3
End of 1993:	76.3	76.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B

F001

F002

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	7.89E-01	Curies/m3
Pu239	1.42E-01	Curies/m3
U233	1.33E-01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING CH GENERATOR SITE MD

WASTE STREAM MWIR ID	IN-W304
WIPP ID	IN-W304
Local ID	ID-EGG-134TN-825
MATRIX CODE	5190
SITE FINAL FORM IDC	
STREAM NAME	Equipment
DESCRIPTION	
Waste Matrix Code Group	Uncategorized Metal
Site Matrix Description	Waste primarily consists of noncombustible wastes such as small tanks, dissolvers, motors, pumps, piping, small valves, tools, hotplates, presses, grinders, metallurgical polishers, ringstands, concrete, floor tile, sheet metal, vacuum sweeper filters, sweeper hose, and glass. Limited amounts of combustible wastes, such as plastic tanks, will be present.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

8600003

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING CH GENERATOR SITE MD

IN-W304 CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 13
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	106.4	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	19.4	0.0	0.0
Other Inorganic Materials	41.6	0.0	0.0
Cellulosics	15.1	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.9	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	10.6	24.2	m3
End of 1993:	10.6	24.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	2.27E+01	Curies/m3
Pu239	1.33E-01	Curies/m3
Pu240	2.77E-02	Curies/m3
Pu52	1.38E-03	Curies/m3
Pu83	2.77E+00	Curies/m3

Comments

13 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING CH GENERATOR SITE MD

IN-W304

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 269
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	243.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	44.4	0.0	0.0
Other Inorganic Materials	95.1	0.0	0.0
Cellulosics	34.4	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	2.1	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	55.9	55.9	m3
End of 1993:	55.9	55.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	5.17E+01	Curies/m3
Pu239	3.05E-01	Curies/m3
Pu240	6.33E-02	Curies/m3
Pu52	3.15E-03	Curies/m3
Pu83	6.32E+00	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE MD

WASTE STREAM

MWIR ID: IN-W305

WIPP ID: IN-W305

Local ID: ID-EGG-114TN-804

MATRIX CODE: 5300

SITE FINAL FORM IDC: Mound

STREAM NAME: Plastic, Tygon, Manipulator Boots, etc.

DESCRIPTION:

Waste Matrix Code Group: Combustible

Site Matrix Description: Waste consists primarily of various types of plastics (PVC, polyethylene, Tygon, etc.) in the form of tubing, piping, sample vials, gaskets, manipulator boots, etc. Limited amounts of other combustible wastes may be included.

NO MIGRATION VARIANCE PETITION ASSIGNMENT:

TRUCON CODE:

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000401

C00402

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING CH GENERATOR SITE MD

IN-W305 CONTAINER: SWB
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 0
Number Projected: 16

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	24.2	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	2.6	0.0	0.0
Other Inorganic Materials	5.5	0.0	0.0
Cellulosics	13.7	0.0	0.0
Rubber	17.5	0.0	0.0
Plastics	42.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	13.1	29.8	m3
End of 1993:	13.1	29.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	4.47E+01	Curies/m3

Comments

Min and max weights are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING CH GENERATOR SITE MD

IN-W305

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 161
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	55.3	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	6.0	0.0	0.0
Other Inorganic Materials	12.5	0.0	0.0
Cellulosics	31.3	0.0	0.0
Rubber	39.9	0.0	0.0
Plastics	95.9	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

Min and max weights are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	33.5	33.5	m3
End of 1993:	33.5	33.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.02E+02	Curies/m3

000403

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W306.1 CONTAINER: SWB overpack
Type/Size:

Container Matl:
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 44
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	214.1	12.6	330.5
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	91.5	44.2	227.4
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	9.2	20.9	m3
End of 1993:	9.2	20.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide Activity

Comments

Number stored (44) is the number of SWBs as a result of overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM

MWIR ID IN-W306.1

WIPP ID IN-W306.1

Local ID ID-EGG-287T-9999

MATRIX CODE 8200

SITE FINAL FORM IDC RFP

STREAM NAME Unknown Solids

DESCRIPTION Uncategorized (TRU): Pre 73 Drums

Waste Matrix Code Group Solidified Inorganics

Site Matrix Description This waste stream was received prior to 1973. As container specific information was not entered into the database prior to 1973, these wastes are uncategorized. It is expected to be similar to other Rocky Flats wastes received since 1973.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X
Non-Defense TRU Waste	
Commercial TRU Waste	
Unknown	

Mixed TRU	X
Non-Mixed TRU	
Suspect Mixed TRU	
Unknown	

Rsearch and Devel. Waste	X
Operations Waste	X
Residues	
Decon and Decommissioning	X
Environmental Restoration	
From Treatment of Waste	
Maintenance	

TSCA		
	Asbestos	
	PCBs	
	Other	
	N/A	X
	Unknown	

604000

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W306.1 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 1451
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	489.0	28.8	754.8
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	208.9	101.0	519.2
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	301.8	301.8	m3
End of 1993:	301.8	301.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide Activity

Comments

5.7% of the waste stored is currently characterized as RH-TRU if internal sheilding is not used. It is anticipated that all waste in this waste stream will be categorized as CH-TRU at the time of shipment to WIPP utilizing minimal internal shielding as necessary. For WTWBIR purposes, all of the waste in this waste stream is assumed to be CH-TRU.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM

MWIR ID	IN-W306.2
WIPP ID	IN-W306.2
Local ID	ID-EGG-287T-9999
MATRIX CODE	8200
SITE FINAL FORM IDC	RFP

STREAM NAME: Unknown Solids

DESCRIPTION: Uncategorized (TRU): Pre 73 Drums

Waste Matrix Code Group: Uncategorized Metal

Site Matrix Description: This waste stream was received prior to 1973. As container specific information was not entered into the database prior to 1973, these wastes are uncategorized. It is expected to be similar to other Rocky Flats wastes received since 1973.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

4070000

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W306.2 CONTAINER: SWB overpack
Type/Size:

Container Matl:
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 44
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	112.1	112.1	112.1
Aluminum-Based Metals/Alloys	12.2	12.2	12.2
Other Metals	10.8	10.8	10.8
Other Inorganic Materials	12.8	1.0	12.8
Cellulosics	3.2	0.0	19.8
Rubber	0.0	0.0	0.0
Plastics	6.6	0.0	29.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	9.2	20.9	m3
End of 1993:	9.2	20.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Number stored (44) is the number of SWBs as a result of overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

IN-W306.2 **CONTAINER:** Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 1451
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	256.1	256.1	256.1
Aluminum-Based Metals/Alloys	27.8	27.8	27.8
Other Metals	24.7	24.7	24.7
Other Inorganic Materials	29.3	2.3	29.3
Cellulosics	7.4	0.0	45.3
Rubber	0.0	0.0	0.0
Plastics	15.1	0.0	67.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	301.8	301.8	m3
End of 1993:	301.8	301.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

5.7% of the waste stored is currently characterized as RH-TRU if internal shielding is not used. It is anticipated that all waste in this waste stream will be categorized as CH-TRU at the time of shipment to WIPP utilizing minimal internal shielding as necessary. For WTWBIR purposes, all of the waste in this waste stream is assumed to be CH-TRU.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

WASTE STREAM MWIR ID	IN-W306.3	**STREAM NAME**	Unknown Solids
WIPP ID	IN-W306.3		
Local ID	ID-EGG-287T-9999	**DESCRIPTION**	Uncategorized (TRU): Pre 73 Drums
MATRIX CODE	8200		
SITE FINAL FORM IDC	RFP		
Waste Matrix Code Group	Heterogeneous		
Site Matrix Description	This waste stream was received prior to 1973. As container specific information was not entered into the database prior to 1973, these wastes are uncategorized. It is expected to be similar to other Rocky Flats wastes received since 1973.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W306.3 CONTAINER: SWB overpack
Type/Size:

Container Matl:
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 44
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	42.1	0.0	715.8
Aluminum-Based Metals/Alloys	0.0	0.0	0.7
Other Metals	0.0	0.0	9.9
Other Inorganic Materials	1.1	0.0	10.5
Cellulosics	35.4	0.0	80.9
Rubber	3.2	0.0	7.2
Plastics	28.4	0.0	65.2
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	9.2	20.9	m3
End of 1993:	9.2	20.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Number stored (44) is the number of SWBs as a result of overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W306.3 CONTAINER: Drum
Type/Size: 55-gallon

Container Mat'l: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 1451
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1634.6
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.1	0.0	22.7
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.3	0.0	16.4
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	301.8	301.8	m3
End of 1993:	301.8	301.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide Activity

Comments

5.7% of the waste stored is currently characterized as RH-TRU if internal sheilding is not used. It is anticipated that all waste in this waste stream will be categorized as CH-TRU at the time of shipment to WIPP utilizing minimal internal shielding as necessary. For WTWBIR purposes, all of the waste in this waste stream is assumed to be CH-TRU.

0604110

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

WASTE STREAM MWIR ID	IN-W306.4
WIPP ID	IN-W306.4
Local ID	ID-EGG-287T-9999
MATRIX CODE	8200
SITE FINAL FORM IDC	RFP
Waste Matrix Code Group	Filter
STREAM NAME	Unknown Solids
DESCRIPTION	Uncategorized (TRU): Pre 73 Drums
Site Matrix Description	This waste stream was received prior to 1973. As container specific information was not entered into the database prior to 1973, these wastes are uncategorized. It is expected to be similar to other Rocky Flats wastes received since 1973.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000413

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W306.4

CONTAINER: SWB overpack
Type/Size:

Container Matl:
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 44
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	73.7	21.1	219.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	9.2	20.9	m3
End of 1993:	9.2	20.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Number stored (44) is the number of SWBs as a result of overpacking 4 drums/SWB.

0014002

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN **WASTE TYPE** MTRU **HANDLING** CH **GENERATOR SITE** RF

IN-W306.4 **CONTAINER:** Drum **Type/Size:** 55-gallon **Container Matl:** steel **Int. Vol/Ctnr:** 0.208 m3 **Liner Type:** **Liner Material:** **Number Stored:** 1451 **Number Projected:** 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	168.3	48.1	500.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	301.8	301.8	m3
End of 1993:	301.8	301.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

5.7% of the waste stored is currently characterized as RH-TRU if internal sheilding is not used. It is anticipated that all waste in this waste stream will be categorized as CH-TRU at the time of shipment to WIPP utilizing minimal internal shielding as necessary. For WTWBIR purposes, all of the waste in this waste stream is assumed to be CH-TRU.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE IN, RF

WASTE STREAM MWIR ID	IN-W308
WIPP ID	IN-W308
Local ID	ID-EGG-287T-000
MATRIX CODE	8200
SITE FINAL FORM IDC	RFP
STREAM NAME	Unknown Solids
DESCRIPTION	Uncategorized (TRU): Not Recorded - Unknown
Waste Matrix Code Group	Unknown
Site Matrix Description	This waste stream, generated at the INEL, contains waste retrieved from shallow land burial during the INEL Early Waste Retrieval (EWR) and the Initial Drum Retrieval (IDR) projects. Most of these wastes are believed to have been initially generated at the Rocky Flats Plant. No content information is available The stream is believed to consist of various types of waste generated by plutonium and nonplutonium operations. Any presence of hazardous wastes is unknown at this time.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

0004176

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE IN, RF

IN-W308 CONTAINER: SWB overpack
Type/Size:

Container Matl:
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 377
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	312.8	713.2	m3
End of 1993:	312.8	713.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	3.73E-01	Curies/m3
Pu238	2.06E-02	Curies/m3
Pu239	1.44E-01	Curies/m3
Pu52	1.19E-01	Curies/m3

Comments

Number stored (377) is the number of SWBs as a result of overpacking 4 drums/SWB.

1417009

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE IN, RF

IN-W308 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 4466
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	929.0	929.0	m3
End of 1993:	929.0	929.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	8.53E-01	Curies/m3
Pu238	4.71E-02	Curies/m3
Pu239	3.29E-01	Curies/m3
Pu52	2.72E-01	Curies/m3

TYPICAL EPA CODES APPLICABLE

UNK

Comments

6.7% of the waste stored is currently characterized as RH-TRU if internal sheilding is not used. It is anticipated that all waste in this waste stream will be categorized as CH-TRU at the time of shipment to WIPP utilizing minimal internal shielding as necessary. For WTWBIR purposes, all of the waste in this waste stream is assumed to be CH-TRU.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM MWIR ID IN-W309

WIPP ID IN-W309

Local ID ID-EGG-158T-003

MATRIX CODE 3114

SITE FINAL FORM IDC RFP

Waste Matrix Code Group Solidified Organics

Site Matrix Description

STREAM NAME Organic Setups

DESCRIPTION This waste stream contains liquid organic wastes generated at RFP. About 47% of the organic waste stream is lathe coolant, which is 60% *Texaco Regal oil and 40% carbon tetrachloride.* About 10% of the organic waste stream is trichloroethane. The remainder is other organic wastes. These liquid wastes were mixed with calcium silicate to form a grease or paste-like material.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 212

TRUCON CODE ID 212

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000419

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W309

CONTAINER: SWB overpack
Type/Size:

Container Matl:
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 120
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	4.9	0.0	17.8
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	4.6	0.0	11.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	386.2	303.0	469.4
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

Comments

Number stored (120) is the number of SWBs as a result of overpacking 4 drums/SWB.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	99.1	227.2	m3
End of 1993:	99.1	227.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D005A
D011A
F001
F002
F004
P015

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.05E-02	Curies/m3
Pu52	1.34E+00	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W309 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 1232
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	11.3	0.0	40.6
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	10.6	0.0	25.7
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	882.0	692.0	1072.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	256.0	256.0	m3
End of 1993:	256.0	256.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D005A
D011A
F001
F002
F004
P015

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	5.19E-02	Curies/m3
Pu52	3.05E+00	Curies/m3

124000

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | **WASTE TYPE** MTRU | **HANDLING** CH | **GENERATOR SITE** RF

WASTE STREAM MWIR ID	IN-W311	**STREAM NAME**	Salt Waste
WIPP ID	IN-W311		
Local ID	ID-EGG-146T-409	**DESCRIPTION**	Salts (TRU): Molten Salts - 30% Unpulverized
MATRIX CODE	3140		
SITE FINAL FORM IDC	RFP		
Waste Matrix Code Group	Salt Waste		
Site Matrix Description	This waste was generated at the Rocky Flats Plant. Very little information is available about this content code. The composition of the salt itself is not specified.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT | **TRUCON CODE**

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000423

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W311

CONTAINER: SWB overpack
Type/Size:

Container Matl:
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 2
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	12.6	0.0	25.3
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	51.2	10.0	92.8
Other Inorganic Materials	21.8	20.8	22.8
Cellulosics	5.7	0.0	11.5
Rubber	0.0	0.0	0.0
Plastics	4.5	2.9	6.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	6.0		

Comments

Number stored (2) is the number of SWBs as a result of overpacking 4 drums/SWB.

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.8	4.2	m3
End of 1993:	1.8	4.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D028

F001

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	4.97E+01	Curies/m3
Pu52	7.07E+02	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

IN-W311

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 23
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	28.8	0.0	57.7
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	117.0	22.9	212.0
Other Inorganic Materials	49.8	47.5	52.0
Cellulosics	13.1	0.0	26.2
Rubber	0.0	0.0	0.0
Plastics	10.2	6.6	13.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4.7	4.7	m3
End of 1993:	4.7	4.7	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D028

F001

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.14E+02	Curies/m3
Pu52	2.66E+02	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

WASTE STREAM

MWIR ID IN-W312

WIPP ID IN-W312

Local ID ID-EGG-146T-124

MATRIX CODE 3140

SITE FINAL FORM IDC RFP

STREAM NAME Salt Waste

DESCRIPTION Salts (TRU): Pyrochemical Salt Waste

Waste Matrix Code Group: Salt Waste

Site Matrix Description: Pyrochemical salt consists of used chloride salts from pyrochemical processes such as electrorefining, molten salt extraction or direct oxide reduction. Very little additional information is available about this content code.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 124

TRUCON CODE ID 124

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000425

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W312

CONTAINER: SWB overpack
Type/Size:

Container Matl:
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	99.8	23.1	254.9
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	6.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.9	2.0	m3
End of 1993:	0.9	2.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	1.57E+02	Curies/m3

TYPICAL EPA CODES APPLICABLE

D003D

Comments

Number stored (1) is the number of SWBs as a result of overpacking 4 drums/SWB.

9200426

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W312

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 11
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	228.0	52.8	582.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	2.3	2.3	m3
End of 1993:	2.3	2.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D003D

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	3.58E+02	Curies/m3

000427

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

WASTE STREAM

MWIR ID IN-W314
WIPP ID IN-W314
Local ID ID-EGG-146T-414

MATRIX CODE 3140
SITE FINAL FORM IDC RFP

STREAM NAME Salt Waste

DESCRIPTION Salts (TRU): Direct Oxide Reduction Salt

Waste Matrix Code Group: Salt Waste

Site Matrix Description: This waste, generated at the Rocky Flats Plant, consists of chunks of salt and ceramic. No other information is available.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X
Non-Defense TRU Waste	
Commercial TRU Waste	
Unknown	

Mixed TRU	X
Non-Mixed TRU	
Suspect Mixed TRU	
Unknown	

Rsearch and Devel. Waste	X
Operations Waste	X
Residues	
Decon and Decommissioning	X
Environmental Restoration	
From Treatment of Waste	
Maintenance	

TSCA	
Asbestos	
PCBs	
Other	
N/A	X
Unknown	

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

IN-W314

CONTAINER: SWB overpack
Type/Size:

Container Matl:
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 4
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	9.7	9.7	9.7
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	65.2	65.2	65.2
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	15.3	15.3	15.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.3	0.7	m3
End of 1993:	0.3	0.7	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

F001

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	3.69E-02	Curies/m3
Pu52	1.35E-02	Curies/m3

Comments

Number stored (4) is the number of SWBs as a result of overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

IN-W314

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 4
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	22.1	22.1	22.1
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	149.0	149.0	149.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	35.0	35.0	35.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.8	0.8	m3
End of 1993:	0.8	0.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

F001

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	8.44E-02	Curies/m3
Pu52	3.09E+02	Curies/m3

050004330

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING RH GENERATOR SITE IN

WASTE STREAM MWIR ID IN-W322
WIPP ID IN-W322
Local ID ID-EGG-144T-154

STREAM NAME Sample Fuel

DESCRIPTION

MATRIX CODE 5190

SITE FINAL FORM IDC

Waste Matrix Code Group: Uncategorized Metal

Site Matrix Description: Waste consists of actinide meutron sources, a tadrum needle, small vials of fuel, and metal containers of experimental fuel capsules.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

134003

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** RH **GENERATOR SITE** IN

IN-W322

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 9
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.9	1.9	m3
End of 1993:	1.9	1.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	1.46E+01	Curies/m3
Pu240	3.04E+00	Curies/m3
U235	3.95E-04	Curies/m3

Comments

Waste material weights are unknown for this waste stream.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** RH **GENERATOR SITE** IN, AW

WASTE STREAM

MWIR ID	IN-W323
WIPP ID	IN-W323
Local ID	ID-EGG-144T-153
MATRIX CODE	5440
SITE FINAL FORM IDC	

STREAM NAME Predominantly Combustible Debris

DESCRIPTION Radioactive Sources (TRU): Combustible Lab Waste

Waste Matrix Code Group Heterogeneous

Site Matrix Description This waste stream was generated at the Argonne National Laboratory-West and NRF 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. Drums of contact-handled waste are stored at the Transuranic Storage Area (TSA). Drums of remote-handled waste are stored at the intermediate level transuranic facility (ILTSF).

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X
Non-Defense TRU Waste	
Commercial TRU Waste	
Unknown	

Mixed TRU	X
Non-Mixed TRU	
Suspect Mixed TRU	
Unknown	

Rsearch and Devel. Waste	X
Operations Waste	X
Residues	
Decon and Decommissioning	X
Environmental Restoration	
From Treatment of Waste	
Maintenance	

TSCA		
	Asbestos	
	PCBs	
	Other	
	N/A	X
	Unknown	

00004 33

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING RH GENERATOR SITE IN, AW

IN-W323 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 10
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	36.8	0.0	63.2
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	2.6	0.0	10.5
Cellulosics	213.2	61.6	357.9
Rubber	2.4	1.6	7.2
Plastics	21.3	4.7	57.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.9	1.9	m3
End of 1993:	1.9	1.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008C

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	2.17E+00	Curies/m3
Pu239	4.01E-01	Curies/m3
Pu241	4.65E+00	Curies/m3
U235	1.54E-04	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

WASTE STREAM MWIR ID	IN-W325	**STREAM NAME**	Unknown Solids
WIPP ID	IN-W325		
Local ID	ID-EGG-288T-815	**DESCRIPTION**	Unknown (TRU): Classified Parts
MATRIX CODE	5300		
SITE FINAL FORM IDC	Mound		
Waste Matrix Code Group	Combustible		
Site Matrix Description	This waste stream was generated at Mound Laboratory.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000435

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU   HANDLING CH   GENERATOR SITE MD

IN-W325

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 2
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.3	0.0	17.9
Other Inorganic Materials	11.1	0.0	17.3
Cellulosics	63.0	63.0	706.7
Rubber	19.3	19.3	194.4
Plastics	191.8	158.7	706.7
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.4	m3
End of 1993:	0.4	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	3.23E+01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** MD

WASTE STREAM	MWIR ID	IN-W327
	WIPP ID	IN-W327
	Local ID	ID-EGG-288T-847
MATRIX CODE		5300
SITE FINAL FORM IDC		Mound
Waste Matrix Code Group		Combustible

STREAM NAME Combustible Debris

DESCRIPTION Unknown (TRU): Low Specific Activity < 100 nCi/g Combustible

Site Matrix Description This waste stream is from Mound Laboratory and consists of nonline generated combustible wastes such as plastic sheeting, paper, reagents, gloves (rubber and cloth), plastic bottles, wood, paper suits, and shoe covers. About 75% of the waste is compacted. The waste may be either dry or damp.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000437

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

IN-W327 CONTAINER: SWB overpack
Type/Size:

Container Matl:
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 2
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.1	0.0	7.8
Other Inorganic Materials	4.9	0.0	7.6
Cellulosics	27.6	27.6	309.5
Rubber	8.5	8.5	85.1
Plastics	84.0	69.5	309.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.2	2.7	m3
End of 1993:	1.2	2.7	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	9.75E+00	Curies/m3

TYPICAL EPA CODES APPLICABLE

UNK

Comments

Number stored (2) is the number of SWBs as a result of overpacking 4 drums/SWB.

6043333

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

IN-W327

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 15
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.3	0.0	17.9
Other Inorganic Materials	11.1	0.0	17.3
Cellulosics	63.0	63.0	706.7
Rubber	19.3	19.3	194.4
Plastics	191.8	158.7	706.7
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3.1	3.1	m3
End of 1993:	3.1	3.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	2.23E+01	Curies/m3

000433

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** MD

WASTE STREAM	MWIR ID	IN-W329	
	WIPP ID	IN-W329	
	Local ID	ID-EGG-288T-848	
MATRIX CODE		5400	
SITE FINAL FORM IDC		Mound	
Waste Matrix Code Group		Heterogeneous	

STREAM NAME Heterogeneous Debris

DESCRIPTION Unknown (TRU): Low Specific Activity < 100 nCi/g Noncombustible

Site Matrix Description This waste stream, generated at Mound Laboratory, consists of nonline generated noncombustible wastes such as tools, pipe, equipment, metal, glass, concrete, plaster, bricks, and dirt. Limited amounts of combustible wastes such as paper, rags, etc. are also included.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

IN-W329

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 6
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	415.6	2.2	764.4
Aluminum-Based Metals/Alloys	17.5	17.5	38.2
Other Metals	9.2	9.2	46.6
Other Inorganic Materials	31.7	0.0	812.5
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	4.8	0.0	4.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.1	1.1	m3
End of 1993:	1.1	1.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.22E+02	Curies/m3
Pu239	5.34E-02	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** MD

WASTE STREAM
MWIR ID: IN-W330
WIPP ID: IN-W330
Local ID: ID-EGG-288T-801

STREAM NAME Plastic/Rubber Debris

DESCRIPTION Unknown (TRU): Plastic, Tygon, Manipulator Boots, etc.

MATRIX CODE 5310

SITE FINAL FORM IDC Mound

Waste Matrix Code Group: Combustible

Site Matrix Description: This waste stream, generated at Mound Laboratory, consists of various types of plastics (PVC, PE tygon, etc.) in the form of tubing, piping, sample vials, gaskets, manipulator boots, etc. Limited amounts of other combustible wastes from content codes 801 and 802 may also be included. One drum contains content code 832, liquid mercury. The wastes are primarily from D&D activities at the plutonium processing and research buildings. Waste was shipped on ? 1977. Limited amounts of waste may be damp.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000444

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

IN-W330 CONTAINER: SWB overpack
Type/Size:

Container Matl:
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 3
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.1	0.0	7.8
Other Inorganic Materials	4.9	0.0	7.6
Cellulosics	27.6	27.6	309.5
Rubber	8.5	8.5	85.1
Plastics	84.0	69.5	309.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	2.1	4.7	m3
End of 1993:	2.1	4.7	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	2.79E+01	Curies/m3
Pu83	3.89E-01	Curies/m3

Comments

Number stored (3) is the number of SWBs as a result of overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

IN-W330 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 26
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.3	0.0	17.9
Other Inorganic Materials	11.1	0.0	17.3
Cellulosics	63.0	63.0	706.7
Rubber	19.3	19.3	194.4
Plastics	191.8	158.7	706.7
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	5.4	5.4	m3
End of 1993:	5.4	5.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	6.36E+01	Curies/m3
Pu83	8.89E-01	Curies/m3

000444

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE BC

WASTE STREAM MWIR ID IN-W332

WIPP ID IN-W332

Local ID ID-EGG-288T-204

MATRIX CODE 3150

SITE FINAL FORM IDC Battelle Columb

STREAM NAME *Solidified Process Residues*

DESCRIPTION Unknown (TRU): Solidified Solutions

Waste Matrix Code Group: Solidified Inorganics

Site Matrix Description: This waste comes from the Battelle Columbus Labs. It is a turco soap decontamination solution (used to decontaminate glove boxes from a Pu lab) *which is solidified in a plaster-of-paris.*

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

0004715

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE BC

IN-W332

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 4
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	394.2	173.1	528.8
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	399.0	173.1	528.8
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.8	0.8	m3
End of 1993:	0.8	0.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.07E+01	Curies/m3
Pu239	7.79E-02	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** BC

WASTE STREAM MWIR ID	IN-W334	**STREAM NAME**	Debris Waste
WIPP ID	IN-W334		
Local ID	ID-EGG-288T-203	**DESCRIPTION**	Unknown (TRU): Paper, Metals, Glass
MATRIX CODE	5000		
SITE FINAL FORM IDC	Battelle Columb		
Waste Matrix Code Group	Heterogeneous		
Site Matrix Description	This waste stream, generated at Battelle Columbus Laboratories, contains a mixture of combustible and noncombustible items in roughly equal proportions. Combustible items include paper and paper products. Noncombustibles are primarily metal and some glass.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000447

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE BC

IN-W334

CONTAINER: SWB overpack
Type/Size:
Container Matl:
Int. Vol/Ctnr: 1.9 m3
Liner Type:
Liner Material:
Number Stored: 2
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	42.1	0.0	715.8
Aluminum-Based Metals/Alloys	0.0	0.0	0.7
Other Metals	0.0	0.0	9.9
Other Inorganic Materials	1.1	0.0	10.5
Cellulosics	35.4	0.0	80.9
Rubber	3.2	0.0	7.2
Plastics	28.4	0.0	65.2
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.5	3.5	m3
End of 1993:	1.5	3.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	4.09E-01	Curies/m3
U235	2.11E-04	Curies/m3

TYPICAL EPA CODES APPLICABLE

UNK

Comments

Number stored (2) is the number of SWBs as a result of overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE BC

IN-W334

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 19
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1634.6
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.1	0.0	22.7
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.3	0.0	16.4
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4.0	4.0	m3
End of 1993:	4.0	4.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	9.33E-01	Curies/m3
U235	4.82E-04	Curies/m3

0004443

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE BC

WASTE STREAM MWIR ID	IN-W336	**STREAM NAME**	Combustible Debris
WIPP ID	IN-W336		
Local ID	ID-EGG-288T-202	**DESCRIPTION**	Unknown (TRU): Combustible Solids
MATRIX CODE	5300		
SITE FINAL FORM IDC	Battelle Columb		
Waste Matrix Code Group	Combustible		
Site Matrix Description	This waste stream, generated at Battelle Columbus Laboratories, contains such combustible items as wood, plastic suits, nylon reinforced plastic tent structures, shoe covers, rubber gloves, and air hose. The waste is from decontamination and deactivation of the plutonium laboratory.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000450

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE BC

IN-W336 CONTAINER: Drum Type/Size: 55-gallon

Container Matl: steel Int. Vol/Ctnr: 0.208 m3

Liner Type: Liner Material:

Number Stored: 20 Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	2.9	0.0	7.2
Cellulosics	575.6	105.8	961.5
Rubber	55.2	55.2	163.5
Plastics	165.6	105.8	288.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4.1	4.1	m3
End of 1993:	4.1	4.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	1.48E-01	Curies/m3

Comments

The weights per container in the MID for boxes are identical to the weights per container for drums I'd rather use the same kg/m3. (Chuck Edinborough)

10400451

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING RH GENERATOR SITE IN

WASTE STREAM

MWIR ID	IN-W337
WIPP ID	IN-W337
Local ID	ID-EGG-288T-200
MATRIX CODE	8200
SITE FINAL FORM IDC	INEL
Waste Matrix Code Group	Unknown
Site Matrix Description	This waste stream was generated at the INEL. Additional information is not available at this time.

STREAM NAME: Unknown Solids

DESCRIPTION: Unknown (TRU): Americium Solids

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000452

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING RH GENERATOR SITE IN

IN-W337

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.2	m3
End of 1993:	0.2	0.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

1540003

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** AW

WASTE STREAM

MWIR ID	IN-W338
WIPP ID	IN-W338
Local ID	ID-EGG-288T-163
MATRIX CODE	8200
SITE FINAL FORM IDC	ANL-W
Waste Matrix Code Group	Unknown
Site Matrix Description	There is no content information on this code, which was generated at INEL

STREAM NAME Unknown Solids

DESCRIPTION Unknown (TRU): ANL-W Analytical Chemistry Laboratory Cold-Line Absorbed Liquid, Misc., Hardware

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE AW

IN-W338

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 6
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.3	1.3	m3
End of 1993:	1.3	1.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	4.68E-01	Curies/m3
U235	1.17E-04	Curies/m3

9800455

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** AW, IN

WASTE STREAM MWIR ID	IN-W339	**STREAM NAME**	Unknown Solids
WIPP ID	IN-W339		
Local ID	ID-EGG-288T-162	**DESCRIPTION**	Unknown (TRU): ANL-W FMF EFL ZR-U Fuel Casting Alloys Residues
MATRIX CODE	8200		
SITE FINAL FORM IDC	ANL-W		
Waste Matrix Code Group	Unknown		
Site Matrix Description	There is no content information for this code, which includes waste from INEL.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

G00456

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE AW, IN

IN-W339

CONTAINER: SWB overpack
Type/Size:

Container Matl:
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 3
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	2.4	5.5	m3
End of 1993:	2.4	5.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	4.83E+00	Curies/m3
Pu240	1.97E-02	Curies/m3
U235	3.63E-04	Curies/m3

Comments

Number stored (3) is the number of SWBs as a result of overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE AW, IN

IN-W339

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 30
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	6.3	6.3	m3
End of 1993:	6.3	6.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	1.10E+01	Curies/m3
Pu240	4.49E-02	Curies/m3
U235	8.29E-04	Curies/m3

03040099

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** RH **GENERATOR SITE** AW, IN

WASTE STREAM MWIR ID	IN-W341	**STREAM NAME**	Unknown Solids
WIPP ID	IN-W341		
Local ID	ID-EGG-288T-160	**DESCRIPTION**	Unknown (TRU): ANL-W HFEF Analytical Chemistry and Metallographic Combustibles
MATRIX CODE	8200		
SITE FINAL FORM IDC	ANL-W		
Waste Matrix Code Group	Unknown		
Site Matrix Description	There is no content information for this code, which includes waste from INEL		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

CCA 000573

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING RH GENERATOR SITE AW, IN

IN-W341 CONTAINER: Drum Type/Size: 55-gallon

Container Matl: steel Int. Vol/Ctnr: 0.208 m3

Liner Type: Liner Material:

Number Stored: 1 Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.2	m3
End of 1993:	0.2	0.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	9.40E+00	Curies/m3
U235	1.32E-03	Curies/m3

000490

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | **WASTE TYPE** MTRU | **HANDLING** CH | **GENERATOR SITE** IN

WASTE STREAM MWIR ID	IN-W342
WIPP ID	IN-W342
Local ID	ID-EGG-288T-157
MATRIX CODE	8200
SITE FINAL FORM IDC	INEL
STREAM NAME	Unknown Solids
DESCRIPTION	Unknown (TRU): Miscellaneous Sources
Waste Matrix Code Group	Unknown
Site Matrix Description	This waste stream was generated at the INEL. Additional information is not available at this time.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000461

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE IN

IN-W342

CONTAINER: Drum
Type/Size: 55-gallon

Container Mat'l: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 2
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.4	m3
End of 1993:	0.4	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	7.48E+00	Curies/m3
Cf252	5.60E-02	Curies/m3
Pu239	6.46E-02	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE IN

WASTE STREAM MWIR ID	IN-W345
WIPP ID	IN-W345
Local ID	ID-EGG-288T-155
MATRIX CODE	5000
SITE FINAL FORM IDC	INEL
STREAM NAME	Debris Waste
DESCRIPTION	Unknown (TRU): TRU Scrap
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	This waste stream, generated at the Idaho National Engineering Laboratory, consists of a plastic glove box, a hydraulic pump containing oil, vacuum pump, centrifuges, tools, and experimental fuel capsules. The presence of hazardous materials is not known, but some absorbed oil is likely.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE IN

IN-W345

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 70
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1634.6
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.1	0.0	22.7
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.3	0.0	16.4
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	14.6	14.6	m3
End of 1993:	14.6	14.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	5.98E+00	Curies/m3
Pu238	1.66E+00	Curies/m3
Pu239	1.35E+00	Curies/m3
Pu240	8.59E-01	Curies/m3
Th232	3.89E-05	Curies/m3
U235	1.79E-05	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** AE

WASTE STREAM MWIR ID	IN-W347	**STREAM NAME**	*Absorbed Aqueous Liquids*
WIPP ID	IN-W347		
Local ID	ID-EGG-288T-102	**DESCRIPTION**	Unknown (TRU): Absorbed Liquids
MATRIX CODE	3113		
SITE FINAL FORM IDC	ANL-E		
Waste Matrix Code Group	Solidified Inorganics		
Site Matrix 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.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000465

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** AE

IN-W347

CONTAINER: SWB overpack
Type/Size:

Container Matl:
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 4
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	44.2	44.2	44.2
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	94.7	73.7	113.7
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3.5	8.0	m3
End of 1993:	3.5	8.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.57E-02	Curies/m3
Pu239	5.36E-01	Curies/m3
Pu240	9.81E-01	Curies/m3
Th232	8.08E-08	Curies/m3
U235	2.61E-07	Curies/m3
U238	2.78E-06	Curies/m3

Comments

Number stored (4) is the number of SWBs as a result of overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE AE

IN-W347

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 244
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	101.0	101.0	101.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	216.3	168.3	259.6
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	50.8	50.8	m3
End of 1993:	50.8	50.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	3.58E-02	Curies/m3
Pu239	1.22E+00	Curies/m3
Pu240	2.24E+00	Curies/m3
Th232	1.85E-07	Curies/m3
U235	5.97E-07	Curies/m3
U238	6.34E-06	Curies/m3

000467

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING RH GENERATOR SITE AE

WASTE STREAM MWIR ID	IN-W349	**STREAM NAME**	Unknown Solids
WIPP ID	IN-W349		
Local ID	ID-EGG-288T-107	**DESCRIPTION**	Unknown (TRU): TRU-Remote Handled Waste
MATRIX CODE	8200		
SITE FINAL FORM IDC	ANL-E		
Waste Matrix Code Group	Unknown		
Site Matrix Description	There is no content information on this code, which was generated at ANL-E.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000468

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING RH GENERATOR SITE AE

IN-W349

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 31
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	6.4	6.4	m3
End of 1993:	6.4	6.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	9.43E-02	Curies/m3
Pu240	6.05E-02	Curies/m3

0004691

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE AE

WASTE STREAM MWIR ID	IN-W350	**STREAM NAME**	Unknown Solids
WIPP ID	IN-W350		
Local ID	ID-EGG-288T-106	**DESCRIPTION**	Unknown (TRU): Special Source Material
MATRIX CODE	8200		
SITE FINAL FORM IDC	ANL-E		
Waste Matrix Code Group	Unknown		
Site Matrix Description	There is no content information on this code, which was generated at ANL-E.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

0004?0

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE AE

IN-W350 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.2	m3
End of 1993:	0.2	0.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	5.74E+01	Curies/m3
Pu240	1.76E+02	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN | **WASTE TYPE** MTRU | **HANDLING** CH | **GENERATOR SITE** AE

WASTE STREAM MWIR ID	IN-W351
WIPP ID	IN-W351
Local ID	ID-EGG-288T-105
MATRIX CODE	5000
SITE FINAL FORM IDC	ANL-E
STREAM NAME	Debris Waste
DESCRIPTION	Unknown (TRU): Empty Bottles
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	This waste stream, generated at Argonne National Laboratory-East, consists of PE and glass bottles used to transport liquid wastes.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE MTRU HANDLING CH GENERATOR SITE AE

IN-W351

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 7
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	4.8	0.0	14.4
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	4.8	0.0	19.2
Cellulosics	287.7	53.4	432.7
Rubber	3.3	1.4	8.7
Plastics	36.0	2.9	60.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.5	1.5	m3
End of 1993:	1.5	1.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	1.75E+00	Curies/m3
Pu240	6.01E+00	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** BT

WASTE STREAM

MWIR ID	IN-W353
WIPP ID	IN-W353
Local ID	ID-EGG-158TN-050
MATRIX CODE	
SITE FINAL FORM IDC	Bettis
Waste Matrix Code Group	Solidified Inorganics
Site Matrix Description	

STREAM NAME Solidified Solutions

DESCRIPTION None available. (INEL) content code is also titled "solidified solutions."

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000474

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING CH GENERATOR SITE BT

IN-W353

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	461.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	4.2	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.2	m3
End of 1993:	0.2	0.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Np237	3.33E-04	Curies/m3
Pu239	1.20E-01	Curies/m3

000475

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID	IN-W354
WIPP ID	IN-W354
Local ID	ID-EGG-146TN-412
MATRIX CODE	3140
SITE FINAL FORM IDC	RFP
Waste Matrix Code Group	Salt Waste
Site Matrix Description	

STREAM NAME Salt Waste

DESCRIPTION Salts (TRU): Gibson Salts

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 224A

TRUCON CODE ID 224A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

0004776

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

IN-W354 CONTAINER: Drum Type/Size: 55-gallon
Container Matl: steel Int. Vol/Ctnr: 0.208 m3
Liner Type: Liner Material:
Number Stored: 1 Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	298.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.2	m3
End of 1993:	0.2	0.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	4.24E+01	Curies/m3

0004177

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM MWIR ID	IN-W355	**STREAM NAME**	Salt Waste
WIPP ID	IN-W355		
Local ID	ID-EGG-146TN-411	**DESCRIPTION**	Salts (TRU): Electrorefining Salt
MATRIX CODE	3140		
SITE FINAL FORM IDC	RFP		
Waste Matrix Code Group	Salt Waste		
Site Matrix Description			

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 114; 224A

TRUCON CODE ID 114; 224A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000473

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

IN-W355

CONTAINER: SWB overpack
Type/Size:

Container Matl:
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	147.4	2.9	193.7
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.8	m3
End of 1993:	0.4	0.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	9.37E+01	Curies/m3

Comments

Number stored (1) is the number of SWBs as a result of overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** RF

IN-W355 **CONTAINER:** Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 5
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	336.7	6.7	442.3
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.9	0.9	m3
End of 1993:	0.9	0.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	2.14E+02	Curies/m3

050430

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID	IN-W356
WIPP ID	IN-W356
Local ID	ID-EGG-146TN-410
MATRIX CODE	3140
SITE FINAL FORM IDC	RFP
STREAM NAME	Salt Waste
DESCRIPTION	Salts (TRU): Molten Salts - 30% Pulverized
Waste Matrix Code Group	Salt Waste
Site Matrix Description	

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 224A

TRUCON CODE ID 224A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU   HANDLING CH   GENERATOR SITE RF

IN-W356

CONTAINER: SWB overpack
Type/Size:

Container Matl:
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 2
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	197.9	52.5	273.7
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.3	3.0	m3
End of 1993:	1.3	3.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	6.65E+00	Curies/m3
Pu52	9.36E+00	Curies/m3

Comments

Number stored (2) is the number of SWBs as a result of overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **IN**

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

IN-W356 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 16
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	452.0	120.0	625.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3.3	3.3	m3
End of 1993:	3.3	3.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.52E+01	Curies/m3
Pu52	2.14E+01	Curies/m3

00483

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU **HANDLING** RH **GENERATOR SITE** IN

WASTE STREAM MWIR ID	IN-W358
WIPP ID	IN-W358
Local ID	ID-EGG-144TN-152
MATRIX CODE	5000
SITE FINAL FORM IDC	
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	
STREAM NAME	Debris Waste
DESCRIPTION	Radioactive Sources (TRU): Pu Neutron Sources

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING RH GENERATOR SITE IN

IN-W358 CONTAINER: Drum
Type/Size: 55-gallon

Container Mat'l: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 26
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1634.6
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.1	0.0	22.7
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.3	0.0	16.4
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	5.4	5.4	m3
End of 1993:	5.4	5.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	6.64E+02	Curies/m3
Pu239	3.02E+00	Curies/m3
Pu240	5.81E+00	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING RH GENERATOR SITE

WASTE STREAM MWIR ID	IN-W359	**STREAM NAME**	Unknown Solids
WIPP ID	IN-W359		
Local ID	ID-EGG-144TN-015	**DESCRIPTION**	Radioactive Sources (TRU): Neutron Sources
MATRIX CODE	8200		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Unknown		
Site Matrix Description			

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

98b000

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING RH GENERATOR SITE

IN-W359

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 3
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.6	0.6	m3
End of 1993:	0.6	0.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.40E+02	Curies/m3

Comments

Waste material weights are unknown for this waste stream.

0042087

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU **HANDLING** RH **GENERATOR SITE** BT

WASTE STREAM MWIR ID	IN-W360
WIPP ID	IN-W360
Local ID	ID-EGG-144TN-012
MATRIX CODE	8200
SITE FINAL FORM IDC	
STREAM NAME	Unknown Solids
DESCRIPTION	Radioactive Sources (TRU): Miscellaneous Sources
Waste Matrix Code Group	Unknown
Site Matrix Description	

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

00004388

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU | HANDLING RH | GENERATOR SITE BT

IN-W360

CONTAINER: Drum
Type/Size: 55-gallon

Container Mat'l: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.2	m3
End of 1993:	0.2	0.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide | Activity

Comments

Waste material weights and isotopic composition are unknown for this waste stream.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM MWIR ID	IN-W366	**STREAM NAME**	Solid Process Residues
WIPP ID	IN-W366		
Local ID	ID-EGG-137TN-370	**DESCRIPTION**	Nonmetal Molds and Crucibles (TRU): Leco Crucibles
MATRIX CODE	3000		
SITE FINAL FORM IDC			
Waste Matrix Code Group	*Inorganic Non-metal*		
Site Matrix Description			

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 118; 222A

TRUCON CODE ID 118; 222A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000400

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

IN-W366

CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	128.3	21.1	503.2
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.7	1.6	m3
End of 1993:	0.7	1.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	6.69E-02	Curies/m3
Pu52	2.33E+01	Curies/m3

Comments

1 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

1004.3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

IN-W366

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 9
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	293.0	48.1	1149.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.8	1.8	m3
End of 1993:	1.8	1.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.53E-01	Curies/m3
Pu52	5.32E+01	Curies/m3

00047

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM

MWIR ID	IN-W369
WIPP ID	IN-W369
Local ID	ID-EGG-137TN-303
MATRIX CODE	5340
SITE FINAL FORM IDC	
Waste Matrix Code Group	Graphite
Site Matrix Description	

STREAM NAME Graphite Debris

DESCRIPTION Nonmetal Molds and Crucibles (TRU): Scarfed Graphite Chunks

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 115

TRUCON CODE ID 115

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

IN-W369 CONTAINER: SWB overpack
Type/Size:

Container Mat'l: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 4
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	153.7	16.9	183.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3.5	7.9	m3
End of 1993:	3.5	7.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	6.64E-02	Curies/m3
Pu52	2.20E+01	Curies/m3

Comments

4 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **IN**

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

IN-W369

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 43
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	351.0	38.5	418.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	*131.0*		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	8.9	8.9	m3
End of 1993:	8.9	8.9	m3
1994:	*0.0*	*0.0*	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	*1.52E-01*	*Curies/m3*
Pu52	5.02E+01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM MWIR ID	IN-W370	**STREAM NAME**	Graphite Debris
WIPP ID	IN-W370		
Local ID	ID-EGG-137TN-115	**DESCRIPTION**	Nonmetal Molds and Crucibles (TRU): Graphite Waste
MATRIX CODE	5340		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Graphite		
Site Matrix Description			

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 115

TRUCON CODE ID 115

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		*Rsearch and Devel. Waste*	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

IN-W370 CONTAINER: SWB overpack
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type:
Liner Material:

Number Stored: 23
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	153.7	16.9	183.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	18.7	42.7	m3
End of 1993:	18.7	42.7	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	2.69E+01	Curies/m3
U235	5.18E-07	Curies/m3

Comments

23 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

IN-W370 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 231
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	351.0	38.5	418.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	48.1	48.1	m3
End of 1993:	48.1	48.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	6.15E+01	Curies/m3
U235	1.18E-06	Curies/m3

0070438

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM

MWIR ID	IN-W371
WIPP ID	IN-W371
Local ID	ID-EGG-132TN-416
MATRIX CODE	5100
SITE FINAL FORM IDC	
STREAM NAME	Metal Debris
DESCRIPTION	Metals (TRU): Zinc Magnesium Alloy Metal
Waste Matrix Code Group	Uncategorized Metal
Site Matrix Description	

NO MIGRATION VARIANCE PETITION ASSIGNMENT ID 217A

TRUCON CODE ID 217A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X
Non-Defense TRU Waste	
Commercial TRU Waste	
Unknown	

Mixed TRU	
Non-Mixed TRU	X
Suspect Mixed TRU	
Unknown	

Rsearch and Devel. Waste	X
Operations Waste	X
Residues	
Decon and Decommissioning	X
Environmental Restoration	
From Treatment of Waste	
Maintenance	

TSCA	
Asbestos	
PCBs	
Other	
N/A	X
Unknown	

0004233

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

IN-W371

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	615.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.2	m3
End of 1993:	0.2	0.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	5.03E+02	Curies/m3
Pu52	3.43E+02	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU **HANDLING** RH **GENERATOR SITE** BT

WASTE STREAM

MWIR ID	IN-W372
WIPP ID	IN-W372
Local ID	ID-EGG-132TN-081
MATRIX CODE	8200
SITE FINAL FORM IDC	
Waste Matrix Code Group	Unknown
Site Matrix Description	

STREAM NAME Unknown solids

DESCRIPTION Metals (TRU): Met Samples Fissile

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

100050

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING RH GENERATOR SITE BT

IN-W372

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 17
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3.5	3.5	m3
End of 1993:	3.5	3.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Waste material weights and isotopic activity are unknown for this waste stream.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

WASTE STREAM MWIR ID	IN-W374	**STREAM NAME**	Concrete Debris
WIPP ID	IN-W374		
Local ID	ID-EGG-155TN-960	**DESCRIPTION**	Concrete-Brick (TRU): Concrete, Asphalt, etc.
MATRIX CODE	5210		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Inorganic Non-metal		
Site Matrix Description			

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

IN-W374 CONTAINER: SWB Type/Size:

Container Matl: steel Int. Vol/Ctnr: 1.9 m3

Liner Type: Liner Material:

Number Stored: 4 Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	136.5	3.8	379.1
Cellulosics	5.3	5.3	5.3
Rubber	0.0	0.0	0.0
Plastics	5.3	5.3	5.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	28.4	4.2	379.1
Packaging Materials, Steel	210.0		
Packaging Material, Plastic	16.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	2.7	6.2	m3
End of 1993:	2.7	6.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	6.19E+00	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME IN

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** RF

IN-W374 **CONTAINER:** Drum **Type/Size:** 55-gallon

Container Matl: steel **Int. Vol/Ctnr:** 0.208 m3

Liner Type: **Liner Material:**

Number Stored: 34 **Number Projected:** 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	311.6	8.7	865.8
Cellulosics	12.0	12.0	12.0
Rubber	0.0	0.0	0.0
Plastics	12.0	12.0	12.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	64.9	9.6	865.8
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	7.0	7.0	m3
End of 1993:	7.0	7.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu52	1.41E+01	Curies/m3

Comments

4 in number stored is the number of SWBs that result from overpacking 4 drums/SWB.

Knolls Atomic Power Laboratory – Schnecetedy

KNOLLS ATOMIC POWER LABORATORY (KA) - SCHENECTADY, NY
WASTE STREAM PROFILES

The following modifications were made by the WTWBIR team in developing the KA waste stream profiles:

- The container numbers in waste stream KA-W016 were changed to match the volumes provided on the form.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME KA

WASTE TYPE TRU HANDLING CH GENERATOR SITE KA

WASTE STREAM MWIR ID		**STREAM NAME**	Transuranic Debris
WIPP ID	KA-T001	**DESCRIPTION**	Non-mixed TRU derived from IDB
Local ID			
MATRIX CODE			
SITE FINAL FORM IDC			
Waste Matrix Code Group	Heterogeneous		
Site Matrix Description			

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000509

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME KA | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE KA

KA-T001 CONTAINER: Drum | Type/Size: 55-gallon

Container Matl: steel | Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid | Liner Material: 80 mil HDPE

Number Stored: 12 | Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	98.2	0.0	1634.6
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.1	0.0	22.7
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.0	0.0	184.6
Rubber	7.3	0.0	16.4
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	2.4	2.4	m3
End of 1993:	2.4	2.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	3.10E-01	Curies/m3
Pu239	1.40E-04	Curies/m3
Pu240	1.60E-04	Curies/m3
Pu241	8.10E-02	Curies/m3
Pu242	2.40E-06	Curies/m3
Am241	2.40E-03	Curies/m3
Co60	5.00E-02	Curies/m3
Sr90	9.60E-01	Curies/m3
Y90	9.60E-01	Curies/m3
Cs137	9.60E-01	Curies/m3
Ba137m	9.20E+01	Curies/m3
MFP	4.60E-01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **KA**

WASTE TYPE MTRU HANDLING RH GENERATOR SITE KA

WASTE STREAM

MWIR ID	KA-W016
WIPP ID	KA-W016
Local ID	Not Reported
MATRIX CODE	5000
SITE FINAL FORM IDC	

STREAM NAME: Transuranic Debris

DESCRIPTION:

Waste Matrix Code Group: Heterogeneous

Site Matrix 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. Homogenaity of the waste packages is currently unknown. Details of waste characteristics will be developed upon generation. This waste stream will not be a moratorium waste.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000511

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME KA

WASTE TYPE MTRU HANDLING RH GENERATOR SITE KA

KA-W016 CONTAINER Type/Size: RH Canister

Container Matl: Steel/lead
Int. Vol/Ctnr: 0.89 m3
Liner Type:
Liner Material:

Number Stored: 13
Number Projected: 29

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	98.2	0.0	1634.6
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.1	0.0	22.7
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.5
Rubber	7.3	0.0	16.4
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	11.23	11.23	m3
End of 1993:	11.27	11.27	m3
1994:	0.87	0.87	m3/yr
1995:	0.87	0.87	m3/yr
1996:	0.87	0.87	m3/yr
1997:	0.87	0.87	m3/ry
1998-2002:	0.87	0.87	m3/yr
2003-2022:	0.87	0.87	m3/yr

TYPICAL EPA CODES APPLICABLE

D004A
D005A
D006A
D007A
D008A
D009A
D009B
D009C
D010A
D011A
D018
D035
D039
D040
F001
F002

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	3.10E-01	Curies/m3
Pu239	1.40E-04	Curies/m3
Pu240	1.60E-04	Curies/m3
Pu241	8.10E-02	Curies/m3
Pu242	2.40E-06	Curies/m3
Am241	2.40E-03	Curies/m3
Co60	5.00E-02	Curies/m3
Sr90	9.60E-01	Curies/m3
Y90	9.60E-01	Curies/m3
Cs137	9.60E-01	Curies/m3
Ma137m	9.20E-01	Curies/m3
MFP	4.60E-01	Curies/m3

Footnotes

The yearly generation rates were adjusted to match the 25.2 m3 of projected waste reported in the WTWBIR waste stream profiles and the Phase II MWIR.

SITE NAME KA

WASTE TYPE MTRU HANDLING RH GENERATOR SITE KA

F003

F005A

000513

Los Alamos National Laboratory

LOS ALAMOS NATIONAL LABORATORY (LA) WASTE STREAM PROFILES

The following modifications were made by the WTWBIR team in developing the LA waste stream profiles:

- Final Waste Form Groups were not assigned by LA but by the WTWBIR team in order to permit roll-ups of the data. However, the Final Waste Form Groups are based on the descriptions and parameters provided by LA.
- For the years 1994 to 2022, LA reported cumulative volumes instead of volumes generated per year. The WTWBIR team has modified the site reported data so that volumes can be consistently rolled-up across all the sites.
- Packaging material parameters were incorrectly reported by LA. These were discussed with LA and corrected by the WTWBIR team.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** LA

WASTE STREAM

MWIR ID

WIPP ID LA-T001

Local ID

MATRIX CODE

SITE FINAL FORM IDC

STREAM NAME Mixed Scrap Metal

DESCRIPTION

Waste Matrix Code Group Uncategorized Metal

Site Matrix Description Mixed metal scrap and incidental combustibles.

NO MIGRATION VARIANCE PETITION ASSIGNMENT LA 125A

TRUCON CODE LA 125A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X
Non-Defense TRU Waste	
Commercial TRU Waste	
Unknown	

Mixed TRU	
Non-Mixed TRU	X
Suspect Mixed TRU	
Unknown	

Rsearch and Devel. Waste	X
Operations Waste	
Residues	
Decon and Decommissioning	
Environmental Restoration	
From Treatment of Waste	
Maintenance	

TSCA		
	Asbestos	
	PCBs	
	Other	
	N/A	X
	Unknown	

000516

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU HANDLING CH GENERATOR SITE LA

LA-T001

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 364
Number Projected: 2753

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	302.9	76.9	913.5
Other Inorganic Materials	6.8	6.8	6.8
Cellulosics	64.0	59.2	68.7
Rubber	1.1	1.0	1.2
Plastics	5.3	4.9	5.7
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	72.7	72.7	m3
End of 1993:	74.6	74.6	m3
1994:	20.5	20.5	m3/yr
1995:	20.0	20.0	m3/yr
1996:	20.0	20.0	m3/yr
1997:	20.0	20.0	m3/ry
1998-2002:	20.0	20.0	m3/yr
2003-2022:	20.0	20.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Cm244	2.33E-04	Curies/m3
Pu238	9.51E+02	Curies/m3
Pu239	2.10E+04	Curies/m3
Pu52	5.26E+00	Curies/m3
Pu53	1.69E+00	Curies/m3
Pu54	8.56E-01	Curies/m3
Pu56	1.82E-01	Curies/m3
Pu83	9.17E+01	Curies/m3

000517

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU HANDLING CH GENERATOR SITE LA

WASTE STREAM MWIR ID	
WIPP ID	LA-T004
Local ID	
MATRIX CODE	
SITE FINAL FORM IDC	
STREAM NAME	
DESCRIPTION	
Waste Matrix Code Group	Combustible
Site Matrix Description	Combustible waste - paper, rags, plastic, rubber, etc.

NO MIGRATION VARIANCE PETITION ASSIGNMENT LA 116A

TRUCON CODE LA 116A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000518

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** LA

LA-T004

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 7297
Number Projected: 8208

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	257.7	254.0	265.2
Aluminum-Based Metals/Alloys	0.4	0.4	0.4
Other Metals	18.8	18.8	89.7
Other Inorganic Materials	6.8	6.8	6.8
Cellulosics	64.0	59.2	68.7
Rubber	1.1	1.0	1.2
Plastics	5.3	4.9	5.7
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1499.7	1499.7	m3
End of 1993:	1515.9	1515.9	m3
1994:	60.0	60.0	m3/yr
1995:	60.0	60.0	m3/yr
1996:	60.0	60.0	m3/yr
1997:	60.0	60.0	m3/ry
1998-2002:	60.0	60.0	m3/yr
2003-2022:	60.0	60.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.27E+01	Curies/m3
Am44	1.66E+01	Curies/m3
Am45	4.95E-03	Curies/m3
Cm243	1.49E+00	Curies/m3
Cm244	6.05E+01	Curies/m3
MFP	4.78E+02	Curies/m3
Np237	1.53E-03	Curies/m3
Np82	1.62E-03	Curies/m3
Pu238	3.84E+04	Curies/m3
Pu239	3.39E+01	Curies/m3
Pu240	4.00E-04	Curies/m3
Pu42	3.59E+02	Curies/m3
Pu51	1.93E+01	Curies/m3
Pu52	3.47E+03	Curies/m3
Pu53	1.19E+02	Curies/m3
Pu54	1.14E+03	Curies/m3
Pu55	1.77E+01	Curies/m3
Pu56	1.44E+02	Curies/m3
Pu57	6.03E+01	Curies/m3
Pu83	2.06E+04	Curies/m3
U12	4.82E-03	Curies/m3
U23	4.11E-05	Curies/m3
U233	3.23E-02	Curies/m3
U235	2.65E-03	Curies/m3
U238	8.39E-06	Curies/m3
U24	5.48E-06	Curies/m3
U25	9.33E-06	Curies/m3
U31	1.26E-04	Curies/m3
U32	5.59E-06	Curies/m3
U33	4.19E-06	Curies/m3
U34	1.64E-06	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU HANDLING CH GENERATOR SITE LA

U35	1.62E-05	Curies/m3
U36	1.61E-04	Curies/m3
U37	5.21E-05	Curies/m3
U38	6.19E-03	Curies/m3
U39	4.83E-03	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE LA

WASTE STREAM	MWIR ID		STREAM NAME
	WIPP ID	LA-T005	
	Local ID		DESCRIPTION
MATRIX CODE			
SITE FINAL FORM IDC			

Waste Matrix Code Group: Uncategorized Metal

Site Matrix Description: Non-combustible scrap - small tools, cans, small equipment items, broken glass, etc.

NO MIGRATION VARIANCE PETITION ASSIGNMENT: LA 117A; 118A

TRUCON CODE: LA 117A; 118A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000521

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU HANDLING CH GENERATOR SITE LA

LA-T005

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 6975
Number Projected: 5449

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	257.7	254.0	265.2
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	302.9	76.9	913.5
Other Inorganic Materials	6.8	6.8	6.8
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1433.5	1433.5	m3
End of 1993:	1449.1	1449.1	m3
1994:	40.0	40.0	m3/yr
1995:	40.0	40.0	m3/yr
1996:	40.0	40.0	m3/yr
1997:	40.0	40.0	m3/ry
1998-2002:	40.0	40.0	m3/yr
2003-2022:	40.0	40.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Ac227	4.37E-01	Curies/m3
Am241	6.00E+01	Curies/m3
Am44	1.55E+01	Curies/m3
Am45	2.08E-01	Curies/m3
Bk249	1.00E-03	Curies/m3
Cd109	2.65E+03	Curies/m3
Cf249	1.00E-03	Curies/m3
Cm242	1.02E-03	Curies/m3
Cm244	1.62E+02	Curies/m3
Co60	1.00E-03	Curies/m3
MFP	5.68E+01	Curies/m3
Np237	2.59E-03	Curies/m3
Np82	1.86E-03	Curies/m3
Pa231	1.11E-03	Curies/m3
Po210	1.00E-03	Curies/m3
Pu238	3.09E+04	Curies/m3
Pu239	6.49E+01	Curies/m3
Pu242	3.87E-02	Curies/m3
Pu41	9.00E-02	Curies/m3
Pu42	3.23E+02	Curies/m3
Pu51	3.99E+02	Curies/m3
Pu52	1.94E+04	Curies/m3
Pu53	6.92E+02	Curies/m3
Pu54	1.30E+03	Curies/m3
Pu55	1.69E+02	Curies/m3
Pu56	1.33E+02	Curies/m3
Pu57	1.74E+02	Curies/m3
Pu83	2.90E+04	Curies/m3
Ra226	9.05E-01	Curies/m3
U12	5.55E-02	Curies/m3
U15	6.76E-04	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU HANDLING CH GENERATOR SITE LA

U23	7.14E-06	Curies/m3
U233	4.08E+01	Curies/m3
U235	1.98E-03	Curies/m3
U29	3.98E-07	Curies/m3
U31	3.91E-05	Curies/m3
U32	2.26E-04	Curies/m3
U33	2.99E-06	Curies/m3
U34	7.62E-05	Curies/m3
U35	6.24E-05	Curies/m3
U36	3.72E-04	Curies/m3
U37	8.00E-05	Curies/m3
U38	1.42E-03	Curies/m3
U39	3.34E-03	Curies/m3
U70	9.47E-03	Curies/m3
U81	1.16E-02	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU   HANDLING CH   GENERATOR SITE LA

WASTE STREAM MWIR ID	
WIPP ID	LA-T006
Local ID	
MATRIX CODE	
SITE FINAL FORM IDC	
STREAM NAME	
DESCRIPTION	
Waste Matrix Code Group	Solidified Inorganics
Site Matrix Description	Cemented process residues.

NO MIGRATION VARIANCE PETITION ASSIGNMENT LA 114A

TRUCON CODE LA 114A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000524

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** LA

LA-T006 **CONTAINER:** Drum
Type/Size: 55-gallon

Container Matl:
Int. Vol/Ctnr: 0 m3

Liner Type: 1/8" Rigid
Liner Material: HDPE

Number Stored: 23
Number Projected: 138

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.3	38.5	48.1
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	961.5	721.0	1057.7
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4.5	4.5	m3
End of 1993:	4.5	4.5	m3
1994:	1.5	1.5	m3/yr
1995:	1.0	1.0	m3/yr
1996:	1.0	1.0	m3/yr
1997:	1.0	1.0	m3/ry
1998-2002:	1.0	1.0	m3/yr
2003-2022:	1.0	1.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Np237	7.05E-06	Curies/m3
Pu239	1.38E-01	Curies/m3
Pu42	5.43E-01	Curies/m3
Pu51	1.04E-02	Curies/m3
Pu52	5.78E+00	Curies/m3
Pu54	2.41E-03	Curies/m3
Pu56	2.54E+00	Curies/m3
Pu83	6.07E+02	Curies/m3
U233	9.47E-04	Curies/m3
U238	6.66E-05	Curies/m3
U38	7.49E-05	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE LA

WASTE STREAM	MWIR ID	
	WIPP ID	LA-T007
	Local ID	
MATRIX CODE		
SITE FINAL FORM IDC		
STREAM NAME		
DESCRIPTION		
Waste Matrix Code Group		Uncategorized Metal
Site Matrix Description		Non-combustible hot-cell waste.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000526

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU HANDLING CH GENERATOR SITE LA

LA-T007

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 33
Number Projected: 279

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	302.9	76.9	913.5
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	6.9	6.9	m3
End of 1993:	6.9	6.9	m3
1994:	2.1	2.1	m3/yr
1995:	2.0	2.0	m3/yr
1996:	2.0	2.0	m3/yr
1997:	2.0	2.0	m3/ry
1998-2002:	2.0	2.0	m3/yr
2003-2022:	2.0	2.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
MFP	2.08E+03	Curies/m3
Pu238	1.74E+00	Curies/m3
Pu239	4.63E+01	Curies/m3
Pu52	5.28E+00	Curies/m3
Pu83	2.25E+01	Curies/m3
U235	3.21E-03	Curies/m3
U38	5.63E-04	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE LA

WASTE STREAM

MWIR ID:

WIPP ID: LA-T008

Local ID:

STREAM NAME

DESCRIPTION

MATRIX CODE

SITE FINAL FORM IDC

Waste Matrix Code Group: Soils

Site Matrix Description: Contaminated soil.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000528

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU HANDLING CH GENERATOR SITE LA

LA-T008

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 521
Number Projected: 690

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	1200.0	1000.0	1600.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	109.4	109.4	m3
End of 1993:	109.4	109.4	m3
1994:	4.6	4.6	m3/yr
1995:	5.0	5.0	m3/yr
1996:	5.0	5.0	m3/yr
1997:	5.0	5.0	m3/ry
1998-2002:	5.0	5.0	m3/yr
2003-2022:	5.0	5.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	6.00E-03	Curies/m3
Pu238	6.81E-03	Curies/m3
Pu239	2.74E+01	Curies/m3
Pu83	2.13E+02	Curies/m3

0005321

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU HANDLING CH GENERATOR SITE LA

WASTE STREAM MWIR ID	
WIPP ID	LA-T009
Local ID	
MATRIX CODE	
SITE FINAL FORM IDC	
STREAM NAME	
DESCRIPTION	
Waste Matrix Code Group	Uncategorized Metal
Site Matrix Description	Metal from gloveboxes & equipment repackaged from FRP boxes.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000530

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE LA

LA-T009

CONTAINER: Drum
Type/Size: 55 gallon drum

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 202
Number Projected: 276

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	302.9	76.9	913.5
Other Inorganic Materials	6.8	6.8	6.8
Cellulosics	64.0	59.2	68.7
Rubber	1.1	1.0	1.2
Plastics	5.3	4.9	5.7
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	22.6	22.6	m3
End of 1993:	42.4	42.4	m3
1994:	1.6	1.6	m3/yr
1995:	2.0	2.0	m3/yr
1996:	2.0	2.0	m3/yr
1997:	2.0	2.0	m3/ry
1998-2002:	2.0	2.0	m3/yr
2003-2022:	2.0	2.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	1.03E+01	Curies/m3
Pu52	2.04E+01	Curies/m3
Pu54	3.11E+02	Curies/m3
Pu83	2.44E+01	Curies/m3

Comments

Repackaging to be completed in future estimates are for final form.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU HANDLING RH GENERATOR SITE LA

WASTE STREAM

MWIR ID	
WIPP ID	LA-T010
Local ID	
MATRIX CODE	
SITE FINAL FORM IDC	
Waste Matrix Code Group	Combustible
Site Matrix Description	Combustible waste - papers, rags, plastic, rubber, etc.

STREAM NAME

DESCRIPTION

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000532

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU HANDLING RH GENERATOR SITE LA

LA-T010

CONTAINER: LANL RH Canister
Type/Size:

Container Mat'l: Steel
Int. Vol/Ctnr: 0.11 m3

Liner Type:
Liner Material:

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	257.7	254.0	265.2
Aluminum-Based Metals/Alloys	0.4	0.4	0.4
Other Metals	18.8	18.8	89.7
Other Inorganic Materials	6.8	6.8	6.8
Cellulosics	64.0	59.2	68.7
Rubber	1.1	1.0	1.2
Plastics	5.3	4.9	5.7
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	435.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	14.8	14.8	m3
End of 1993:	14.8	14.8	m3
1994:	0.2	0.2	m3/yr
1995:	0.2	0.2	m3/yr
1996:	0.2	0.2	m3/yr
1997:	0.2	0.2	m3/ry
1998-2002:	0.1	0.1	m3/yr
2003-2022:	0.1	0.1	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
MFP	1.46E+03	Curies/m3
Pu239	4.15E+01	Curies/m3
Pu53	1.49E+00	Curies/m3
Pu55	2.30E+00	Curies/m3
Pu56	1.09E+00	Curies/m3
Pu57	1.32E+00	Curies/m3
U21	1.67E-05	Curies/m3
U235	4.75E-03	Curies/m3
U238	2.00E-05	Curies/m3
U25	2.61E-06	Curies/m3
U36	2.19E-05	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU | HANDLING RH | GENERATOR SITE LA

WASTE STREAM MWIR ID	
WIPP ID	LA-T011
Local ID	
MATRIX CODE	
SITE FINAL FORM IDC	
STREAM NAME	
DESCRIPTION	
Waste Matrix Code Group	Uncategorized Metal
Site Matrix Description	Non-combustible scrap - small tools, small equipment items, broken glass, etc.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU HANDLING RH GENERATOR SITE LA

LA-T011 CONTAINER: RH Can
Type/Size:

Container Matl: Steel
Int. Vol/Ctnr: 10.2 m3

Liner Type:
Liner Material:

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	257.7	254.0	265.2
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	302.9	76.9	913.5
Other Inorganic Materials	6.8	6.8	6.8
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	435.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	51.0	51.0	m3
End of 1993:	51.0	51.0	m3
1994:	10.0	10.0	m3/yr
1995:	10.0	10.0	m3/yr
1996:	10.0	10.0	m3/yr
1997:	10.0	10.0	m3/ry
1998-2002:	2.0	2.0	m3/yr
2003-2022:	0.5	0.5	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Cs137	3.36E+00	Curies/m3
Pu55	3.69E-01	Curies/m3
Ru106	2.46E-02	Curies/m3
Sr90	3.07E+00	Curies/m3
U38	3.45E-05	Curies/m3
Y90	3.07E+00	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU | HANDLING RH | GENERATOR SITE LA

WASTE STREAM

MWIR ID	
WIPP ID	LA-T012
Local ID	
MATRIX CODE	
SITE FINAL FORM IDC	

STREAM NAME

DESCRIPTION

Waste Matrix Code Group: Uncategorized Metal

Site Matrix Description: Non-combustible hot-cell waste.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000536

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE TRU HANDLING RH GENERATOR SITE LA

LA-T012 CONTAINER: RH Can
Type/Size:

Container Mat'l: Steel
Int. Vol/Cntr: 0.2 m3

Liner Type:
Liner Material:

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	302.9	76.9	913.5
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	435.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	10.5	10.5	m3
End of 1993:	10.5	10.5	m3
1994:	0.5	0.5	m3/yr
1995:	0.5	0.5	m3/yr
1996:	0.5	0.5	m3/yr
1997:	0.5	0.5	m3/ry
1998-2002:	0.1	0.1	m3/yr
2003-2022:	0.1	0.1	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
MFP	1.87E+03	Curies/m3
Pu239	3.24E+01	Curies/m3
U235	3.36E-03	Curies/m3

000537

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **LA**

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE LA

WASTE STREAM MWIR ID	LA-W001
WIPP ID	LA-W001
Local ID	
MATRIX CODE	
SITE FINAL FORM IDC	
STREAM NAME	
DESCRIPTION	
Waste Matrix Code Group	Uncategorized Metal
Site Matrix Description	Mixed metal scrap and incidental combustibles.

NO MIGRATION VARIANCE PETITION ASSIGNMENT LA 125A

TRUCON CODE LA 125A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000538

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE MTRU HANDLING CH GENERATOR SITE LA

LA-W001 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 10507
Number Projected: 690

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	302.9	76.9	913.5
Other Inorganic Materials	6.8	6.8	6.8
Cellulosics	64.0	59.2	68.7
Rubber	1.1	1.0	1.2
Plastics	5.2	4.9	5.4
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	2206.4	2206.4	m3
End of 1993:	2206.4	2206.4	m3
1994:	4.6	4.6	m3/yr
1995:	5.0	5.0	m3/yr
1996:	5.0	5.0	m3/yr
1997:	5.0	5.0	m3/ry
1998-2002:	5.0	5.0	m3/yr
2003-2022:	5.0	5.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D001C

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	7.46E-03	Curies/m3
Am44	0.00E+00	Curies/m3
Ba137m	1.43E+00	Curies/m3
Cf251	1.60E-03	Curies/m3
Cs137	1.52E+00	Curies/m3
Eu155	6.13E-02	Curies/m3
H3	0.00E+00	Curies/m3
MAP	5.00E-02	Curies/m3
MFP	6.01E+02	Curies/m3
Np237	4.00E-10	Curies/m3
Pm147	8.68E-02	Curies/m3
Pu238	3.95E+03	Curies/m3
Pu239	4.32E+02	Curies/m3
Pu42	8.04E-01	Curies/m3
Pu51	6.52E-02	Curies/m3
Pu52	4.60E+02	Curies/m3
Pu53	2.26E-01	Curies/m3
Pu54	2.74E+01	Curies/m3
Pu55	4.24E+00	Curies/m3
Pu56	2.56E+00	Curies/m3
Pu83	9.70E-02	Curies/m3
Ra226	1.30E-03	Curies/m3
Rh106	1.12E-02	Curies/m3
Ru106	1.12E-02	Curies/m3
Sb125	6.19E-02	Curies/m3
Sr90	1.39E+00	Curies/m3
Te125m	2.57E-02	Curies/m3
U12	2.02E-03	Curies/m3
U233	0.00E+00	Curies/m3
U235	3.09E-02	Curies/m3
U238	2.00E-06	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE MTRU HANDLING CH GENERATOR SITE LA

U35	0.00E+00	Curies/m3
U38	4.74E-04	Curies/m3
Y90	1.39E+00	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE LA

WASTE STREAM MWIR ID	LA-W002	**STREAM NAME**	
WIPP ID	LA-W002	**DESCRIPTION**	
Local ID			
MATRIX CODE			
SITE FINAL FORM IDC			
Waste Matrix Code Group	Solidified Inorganics		
Site Matrix Description	Solidified aqueous waste, cemented sludge.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT LA 111A; 211A

TRUCON CODE LA 111A; 211A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

0005541

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** LA

LA-W002

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: Rigid
Liner Material: HDPE

Number Stored: 14547
Number Projected: 2753

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	1296.0	1090.0	2180.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3050.1	3050.1	m3
End of 1993:	3053.0	3053.0	m3
1994:	20.0	20.0	m3/yr
1995:	20.0	20.0	m3/yr
1996:	20.0	20.0	m3/yr
1997:	20.0	20.0	m3/ry
1998-2002:	20.0	20.0	m3/yr
2003-2022:	20.0	20.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D003D

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am240	6.39E-03	Curies/m3
Am241	1.39E+04	Curies/m3
MFP	9.47E+00	Curies/m3
Pu238	1.45E+02	Curies/m3
Pu239	8.34E+02	Curies/m3
Pu241	2.73E+00	Curies/m3
Th88	1.09E-04	Curies/m3
U12	5.38E-03	Curies/m3
U233	2.00E-02	Curies/m3
U235	2.40E-02	Curies/m3
U238	1.78E-03	Curies/m3
U81	4.15E-03	Curies/m3

Comments

Average weigth of 55 gal. drum of cemented sludge is 269.65 kg.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE MTRU HANDLING CH GENERATOR SITE LA

WASTE STREAM MWIR ID LA-W003
WIPP ID LA-W003
Local ID

STREAM NAME

DESCRIPTION

MATRIX CODE

SITE FINAL FORM IDC

Waste Matrix Code Group: Solidified Inorganics

Site Matrix Description: Dewatered sludge.

NO MIGRATION VARIANCE PETITION ASSIGNMENT LA 111B; 211B

TRUCON CODE LA 111B; 211B

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000543

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE MTRU HANDLING CH GENERATOR SITE LA

LA-W003

CONTAINER: Drum
Type/Size: 85-gallon

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: Rigid
Liner Material: HDPE

Number Stored: 6083
Number Projected: 2762

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	1296.0	1090.0	2180.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1227.4	1227.4	m3
End of 1993:	1277.4	1277.4	m3
1994:	20.0	20.0	m3/yr
1995:	20.0	20.0	m3/yr
1996:	20.0	20.0	m3/yr
1997:	20.0	20.0	m3/ry
1998-2002:	20.0	20.0	m3/yr
2003-2022:	20.0	20.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D004A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	4.25E+02	Curies/m3
MFP	3.18E-02	Curies/m3
Pu238	1.33E+02	Curies/m3
Pu239	4.29E+02	Curies/m3
Pu241	5.19E-02	Curies/m3
U235	1.09E-04	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE MTRU HANDLING CH GENERATOR SITE LA

WASTE STREAM MWIR ID	LA-W004	STREAM NAME	
WIPP ID	LA-W004		
Local ID		DESCRIPTION	
MATRIX CODE			
SITE FINAL FORM IDC			
Waste Matrix Code Group	Combustible		
Site Matrix Description	Combustible waste - paper, rags, plastic, rubber, etc.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT LA 116A

TRUCON CODE LA 116A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE MTRU HANDLING CH GENERATOR SITE LA

LA-W004 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 1257
Number Projected: 3449

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	257.7	254.0	265.2
Aluminum-Based Metals/Alloys	0.4	0.4	0.4
Other Metals	18.8	18.8	89.7
Other Inorganic Materials	6.8	6.8	6.8
Cellulosics	64.0	59.2	68.7
Rubber	1.1	1.0	1.2
Plastics	5.3	4.9	5.7
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	251.8	251.8	m3
End of 1993:	252.4	252.4	m3
1994:	24.6	24.6	m3/yr
1995:	25.0	25.0	m3/yr
1996:	25.0	25.0	m3/yr
1997:	25.0	25.0	m3/ry
1998-2002:	25.0	25.0	m3/yr
2003-2022:	25.0	25.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D005A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am44	1.78E+01	Curies/m3
Am45	9.25E-03	Curies/m3
Cm46	2.60E-02	Curies/m3
Np82	7.75E-04	Curies/m3
Pu238	1.96E+03	Curies/m3
Pu239	2.06E-01	Curies/m3
Pu42	4.92E+01	Curies/m3
Pu52	5.62E+03	Curies/m3
Pu53	1.57E+01	Curies/m3
Pu54	2.96E+02	Curies/m3
Pu56	2.78E+01	Curies/m3
Pu83	2.42E+03	Curies/m3
Th88	1.09E-08	Curies/m3
U12	7.78E-06	Curies/m3
U18	1.38E-07	Curies/m3
U34	3.60E-06	Curies/m3
U35	1.29E-05	Curies/m3
U36	2.23E-04	Curies/m3
U38	1.03E-03	Curies/m3
U39	5.80E-03	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE MTRU HANDLING CH GENERATOR SITE LA

WASTE STREAM

MWIR ID LA-W005

WIPP ID LA-W005

Local ID

STREAM NAME

DESCRIPTION

MATRIX CODE

SITE FINAL FORM IDC

Waste Matrix Code Group: Uncategorized Metal

Site Matrix Description: Non-combustible scrap - small tools, cans, small equipment items, broken glass, etc.

NO MIGRATION VARIANCE PETITION ASSIGNMENT LA 117A; 118A

TRUCON CODE LA 117A; 118A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X
Non-Defense TRU Waste	
Commercial TRU Waste	
Unknown	

Mixed TRU	X
Non-Mixed TRU	
Suspect Mixed TRU	
Unknown	

Rsearch and Devel. Waste	X
Operations Waste	
Residues	
Decon and Decommissioning	
Environmental Restoration	
From Treatment of Waste	
Maintenance	

TSCA		
	Asbestos	
	PCBs	
	Other	
	N/A	X
	Unknown	

000547

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **LA** | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE LA

LA-W005 CONTAINER: Drum | Type/Size: 55-gallon | Container Matl: Steel | Int. Vol/Ctnr: 0.208 m3 | Liner Type: | Liner Material: | Number Stored: 1039 | Number Projected: 4118

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	257.7	254.0	265.2
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	302.9	76.9	913.5
Other Inorganic Materials	6.8	6.8	6.8
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	207.7	207.7	m3
End of 1993:	212.9	212.9	m3
1994:	25.1	25.1	m3/yr
1995:	25.0	25.0	m3/yr
1996:	25.0	25.0	m3/yr
1997:	25.0	25.0	m3/ry
1998-2002:	25.0	25.0	m3/yr
2003-2022:	25.0	25.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am44	1.94E+01	Curies/m3
Am45	4.63E-03	Curies/m3
Cm46	1.41E-02	Curies/m3
Np82	3.17E-04	Curies/m3
Pu238	8.35E+01	Curies/m3
Pu239	2.25E+00	Curies/m3
Pu42	3.26E+02	Curies/m3
Pu51	1.48E+01	Curies/m3
Pu52	2.83E+04	Curies/m3
Pu53	5.16E+02	Curies/m3
Pu54	3.27E+03	Curies/m3
Pu55	2.25E+02	Curies/m3
Pu56	1.26E+03	Curies/m3
Pu83	3.83E+02	Curies/m3
U12	6.52E-06	Curies/m3
U31	6.39E-06	Curies/m3
U35	8.16E-05	Curies/m3
U38	8.82E-04	Curies/m3
U39	4.32E-03	Curies/m3
U72	1.52E-01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** LA

WASTE STREAM

MWIR ID	LA-W006
WIPP ID	LA-W006
Local ID	
MATRIX CODE	
SITE FINAL FORM IDC	
STREAM NAME	
DESCRIPTION	
Waste Matrix Code Group	Solidified Inorganics
Site Matrix Description	Cemented process residues

NO MIGRATION VARIANCE PETITION ASSIGNMENT LA 114A

TRUCON CODE LA 114A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE MTRU HANDLING CH GENERATOR SITE LA

LA-W006

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: Rigid
Liner Material: HDPE

Number Stored: 2516
Number Projected: 6588

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.3	38.5	48.1
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	961.5	721.0	1057.7
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	422.5	422.5	m3
End of 1993:	513.5	513.5	m3
1994:	29.5	29.5	m3/yr
1995:	30.0	30.0	m3/yr
1996:	30.0	30.0	m3/yr
1997:	30.0	30.0	m3/ry
1998-2002:	30.0	30.0	m3/yr
2003-2022:	30.0	30.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D007A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.32E+03	Curies/m3
Am214	1.41E+04	Curies/m3
Am45	3.70E-01	Curies/m3
Cf249	9.77E-05	Curies/m3
Cm46	1.36E-02	Curies/m3
MFP	0.00E+00	Curies/m3
Pu238	1.31E+01	Curies/m3
Pu239	1.49E+01	Curies/m3
Pu41	1.80E-01	Curies/m3
Pu42	6.87E+02	Curies/m3
Pu51	1.40E+02	Curies/m3
Pu52	1.53E+04	Curies/m3
Pu53	1.13E+03	Curies/m3
Pu54	1.01E+03	Curies/m3
Pu55	2.63E+02	Curies/m3
Pu56	3.08E+02	Curies/m3
Pu57	1.50E+02	Curies/m3
Pu83	2.69E+03	Curies/m3
Th228	0.00E+00	Curies/m3
Th88	2.29E-03	Curies/m3
U12	2.47E-01	Curies/m3
U15	1.21E-03	Curies/m3
U22	1.71E-04	Curies/m3
U23	2.70E-03	Curies/m3
U235	3.21E-03	Curies/m3
U32	7.34E-04	Curies/m3
U33	4.10E-04	Curies/m3
U34	1.36E-04	Curies/m3
U35	1.41E-04	Curies/m3
U36	1.63E-03	Curies/m3
U37	1.90E-04	Curies/m3

U38	1.18E-03	Curies/m3
U70	9.47E-02	Curies/m3
U81	2.36E-02	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** LA

WASTE STREAM

MWIR ID	LA-W009
WIPP ID	LA-W009
Local ID	

STREAM NAME

DESCRIPTION

MATRIX CODE

SITE FINAL FORM IDC

Waste Matrix Code Group	Uncategorized Metal
Site Matrix Description	Metal waste from gloveboxes and equipment

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	*Mixed TRU*	X	*Rsearch and Devel. Waste*	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		*Suspect Mixed TRU*		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000552

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **LA**

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE LA

LA-W009

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 679
Number Projected: 1381

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	302.9	76.9	913.5
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.4	m3
End of 1993:	142.7	142.7	m3
1994:	0.3	0.3	m3/yr
1995:	10.0	10.0	m3/yr
1996:	10.0	10.0	m3/yr
1997:	10.0	10.0	m3/ry
1998-2002:	10.0	10.0	m3/yr
2003-2022:	10.0	10.0	m3/yr

TYPICAL EPA CODES APPLICABLE

F001
F002
F005A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am44	4.68E+02	Curies/m3
Pu52	2.87E+01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE MTRU **HANDLING** RH **GENERATOR SITE** LA

WASTE STREAM MWIR ID LA-WR01
WIPP ID LA-WR01
Local ID

STREAM NAME

DESCRIPTION

MATRIX CODE

SITE FINAL FORM IDC

Waste Matrix Code Group: Uncategorized Metal

Site Matrix Description: Mixed metal scrap and incidental combustibles.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **LA**

WASTE TYPE MTRU HANDLING RH GENERATOR SITE LA

LA-WR01 CONTAINER: LANL RH Canister Type/Size:

Container Matl: Steel Int. Vol/Ctnr: 2.1 m3

Liner Type: Liner Material:

Number Stored: 1 Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	302.9	76.9	913.5
Other Inorganic Materials	6.8	6.8	6.8
Cellulosics	64.0	59.2	68.7
Rubber	1.1	1.0	1.2
Plastics	5.2	4.9	5.7
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	435.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	2.1	2.1	m3
End of 1993:	2.1	2.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Co60	3.00E+01	Curies/m3
Pu239	1.23E+01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE MTRU **HANDLING** RH **GENERATOR SITE** LA

WASTE STREAM

MWIR ID	LA-WR05
WIPP ID	LA-WR05
Local ID	
MATRIX CODE	
SITE FINAL FORM IDC	
STREAM NAME	
DESCRIPTION	
Waste Matrix Code Group	Uncategorized Metal
Site Matrix Description	Non-combustible scrap - small tools, cans, equipment items, broken glass, etc.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LA

WASTE TYPE MTRU HANDLING RH GENERATOR SITE LA

LA-WR05 CONTAINER: LANL RH Canister
Type/Size:

Container Matl: Steel
Int. Vol/Ctnr: 1 m3

Liner Type:
Liner Material:

Number Stored: 13
Number Projected: 15

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	257.7	254.0	265.2
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	302.9	76.9	913.5
Other Inorganic Materials	6.8	6.8	6.8
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	435.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	12.9	12.9	m3
1994:	1.0	1.0	m3/yr
1995:	1.0	1.0	m3/yr
1996:	1.0	1.0	m3/yr
1997:	1.0	1.0	m3/ry
1998-2002:	0.2	0.2	m3/yr
2003-2022:	0.5	0.5	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Ba137m	2.71E+03	Curies/m3
Cs137	2.89E+03	Curies/m3
Eu155	5.40E+01	Curies/m3
Pm147	1.65E+02	Curies/m3
Pu239	1.34E+02	Curies/m3
Rh106	2.12E+01	Curies/m3
Ru106	2.12E+01	Curies/m3
Sb125	1.18E+02	Curies/m3
Sr90	2.64E+03	Curies/m3
Te125m	4.88E+01	Curies/m3
U235	1.14E-04	Curies/m3
Y90	2.64E+03	Curies/m3

Lawrence Berkeley Laboratory

LAWRENCE BERKELEY LABORATORY (LB)
WASTE STREAM PROFILES

The following assumptions/modifications were made by the WTWBIR team in developing the LB waste stream profiles:

- LB Final Waste Form Groups were modified to be consistent with the nomenclature used in the WTWBID. These changes included word and spelling changes. The assigned Final Waste Form Groups are consistent with the information provided by LB.
- The reported volume for the single LB waste stream was divided equally among the four different isotopic mixtures.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LB

WASTE TYPE TRU HANDLING CH GENERATOR SITE LB

WASTE STREAM MWIR ID	
WIPP ID	LB-T001
Local ID	LB-T001
MATRIX CODE	
SITE FINAL FORM IDC	
STREAM NAME	LBL - Waste
DESCRIPTION	Non-mixed TRU
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	The LBL is operated by UC for DOE and performs multi-disciplinary research in the energy sciences, life sciences, and general sciences. During the research a small amount of TRU waste is generated.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LB

WASTE TYPE TRU   HANDLING CH   GENERATOR SITE LB

LB-T001

CONTAINER: Drum
Type/Size: 55-gallon

Container Mat'l: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 1
Number Projected: 5

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	390.0	40.0	800.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	425.0	50.0	850.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	150.0	60.0	200.0
Rubber	0.0	0.0	0.0
Plastics	450.0	150.0	600.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	150.0	50.0	250.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.210	0.210	m3
End of 1993:	0.210	0.210	m3
1994:	0.000	0.000	m3/yr
1995:	0.105	0.105	m3/yr
1996:	0.000	0.000	m3/yr
1997:	0.000	0.000	m3/ry
1998-2002:	0.040	0.040	m3/yr
2003-2022:	0.040	0.040	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	6.73E-03	Curies/m3
Np237	7.21E-03	Curies/m3
Pu239	7.69E-03	Curies/m3
Ra226	1.92E-05	Curies/m3

Comments

Iron-based metal approx. 5%
Other metals approx. 5%
Cellulosics - paper approx. 50%
Plastics approx. 30%
Solidified organic matrix approx. 10%
Drum #1

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LB

WASTE TYPE TRU HANDLING CH GENERATOR SITE LB

LB-T001

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 1
Number Projected: 5

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	390.0	40.0	800.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	425.0	50.0	850.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	150.0	60.0	200.0
Rubber	0.0	0.0	0.0
Plastics	450.0	150.0	600.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	150.0	50.0	250.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.210	0.210	m3
End of 1993:	0.210	0.210	m3
1994:	0.000	0.000	m3/yr
1995:	0.105	0.105	m3/yr
1996:	0.000	0.000	m3/yr
1997:	0.000	0.000	m3/ry
1998-2002:	0.040	0.040	m3/yr
2003-2022:	0.040	0.040	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.99E-02	Curies/m3
Am243	3.37E-02	Curies/m3
Cf249	1.95E-03	Curies/m3
Pu238	2.45E-04	Curies/m3
Pu242	4.28E-04	Curies/m3
Ra226	1.32E-02	Curies/m3

Comments

Iron-based metal approx. 5%
Other metals approx. 5%
Cellulosics - paper approx. 50%
Plastics approx. 30%
Solidified organic matrix approx. 10%
Drum #2

000562

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LB

WASTE TYPE TRU HANDLING CH GENERATOR SITE LB

LB-T001

CONTAINER:	Drum	Container Matl:	Steel	Liner Type:		Number Stored:	1
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:		Number Projected:	5

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	390.0	40.0	800.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	425.0	50.0	850.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	150.0	60.0	200.0
Rubber	0.0	0.0	0.0
Plastics	450.0	150.0	600.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	150.0	50.0	250.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.210	0.210	m3
End of 1993:	0.210	0.210	m3
1994:	0.000	0.000	m3/yr
1995:	0.105	0.105	m3/yr
1996:	0.000	0.000	m3/yr
1997:	0.000	0.000	m3/ry
1998-2002:	0.040	0.040	m3/yr
2003-2022:	0.040	0.040	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Cm 249	2.02E-02	Curies/m3
Pu242	4.81E-03	Curies/m3

Comments

Iron-based metal approx. 5%
Other metals approx. 5%
Cellulosic - paper approx. 50%
Plastics approx. 30%
Solidified organic matrix approx. 10%
Drum #3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LB

WASTE TYPE TRU HANDLING CH GENERATOR SITE LB

LB-T001 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 1
Number Projected: 5

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	390.0	40.0	800.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	425.0	50.0	850.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	150.0	60.0	200.0
Rubber	0.0	0.0	0.0
Plastics	450.0	150.0	600.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	150.0	50.0	250.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.210	0.210	m3
End of 1993:	0.210	0.210	m3
1994:	0.000	0.000	m3/yr
1995:	0.105	0.105	m3/yr
1996:	0.000	0.000	m3/yr
1997:	0.000	0.000	m3/ry
1998-2002:	0.040	0.040	m3/yr
2003-2022:	0.040	0.040	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	6.33E-02	Curies/m3
Am243	4.81E-03	Curies/m3
Cf249	1.20E-03	Curies/m3
Cf250	4.81E-05	Curies/m3
Cm244	1.21E-02	Curies/m3
Es253	4.81E-04	Curies/m3
Es254	5.29E-03	Curies/m3
Np237	5.77E-06	Curies/m3
Pu240	5.05E-03	Curies/m3
Pu242	4.84E-03	Curies/m3
Ra226	2.06E-02	Curies/m3
U233	4.81E-03	Curies/m3

Comments

Iron-based metal approx. 5%
Other metals approx. 5%
Cellulosics - paper approx. 50%
Plastics approx. 30%
Solidified organic matrix approx. 10%
Drum #4

Lawrence Livermore National Laboratory

LAWRENCE LIVERMORE NATIONAL LABORATORY (LL) WASTE STREAM PROFILES

The following assumptions/modifications were made by the WTWBIR team in developing the LL waste stream profiles:

- Since only current volumes were provided by LL, the final form volumes were assumed to be the same as the current volumes.
- The WTWBIR team had to assign identification numbers (IDs) to those LL waste streams not given an identifier by the site. The assigned identification numbers are consistent with the site reported numbers.
- LL Final Waste Form Groups were modified to be consistent with the nomenclature used in the WTWBID. These changes included word and spelling changes. The assigned Final Waste Form Groups are consistent with the information provided by LL.
- The volumes for the year 1993 were changed from an annual rate of generation (m^3/year) to a cumulative value (m^3).

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL | **WASTE TYPE** MTRU | **HANDLING** CH | **GENERATOR SITE** LL

WASTE STREAM

MWIR ID	
WIPP ID	LL-M001
Local ID	Form 1 Mixed
MATRIX CODE	
SITE FINAL FORM IDC	
Waste Matrix Code Group	Combustible

STREAM NAME R&D Glovebox Waste (Form 1)

DESCRIPTION The waste consists of glovebox bagout waste, laboratory trash and some contaminated equipment. The waste contains small amounts of RCRA materials such as solvents or lead shielding. The waste may occasionally include small quantities of solidified liquids, but these are usually segregated as waste form 2.

Site Matrix Description The waste consists mostly of untreated dry solids such as tissues, paper, assorted plastics, glassware, ceramics, and metals. Portland cement or Aquaset is used to solidify small amounts of water-based liquids; Envirostone or Petroset is used to solidify small amounts of solvents and oil-based liquids. The composition varies considerably, but it is predominantly organics (> 90% by weight). The waste does contain small amounts of RCRA listed hazardous materials. Typical hazardous materials are leaded gloves or materials contaminated with solvents.

NO MIGRATION VARIANCE PETITION ASSIGNMENT LL 116

TRUCON CODE LL 116

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000567

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL **WASTE TYPE** MTRU **HANDLING** CH **GENERATOR SITE** LL

LL-M001 **CONTAINER:** Drum **Type/Size:** 55 gallon

Container Mat'l: steel **Int. Vol/Ctnr:** 0.208 m3

Liner Type: rigid **Liner Material:** HDPE

Number Stored: 25 **Number Projected:** 56

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	5.0	0.0	365.0
Aluminum-Based Metals/Alloys	5.0	0.0	365.0
Other Metals	2.0	0.0	365.0
Other Inorganic Materials	1.0	0.0	200.0
Cellulosics	100.0	0.0	365.0
Rubber	5.0	0.0	200.0
Plastics	100.0	5.0	365.0
Solidified, Inorganic matrix	5.0	0.0	100.0
Solidified, Organic matrix	5.0	0.0	100.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	144.0		
Packaging Material, Plastic	33.0		

Comments

Content weight is limited to 76 kg or 365 kg/m3.
All weights are based on process knowledge.
Drum weight averages 30kg of steel.
Liner + liner bag averages 7kg of polyethylene.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	5.2	5.2	m3
End of 1993:	5.2	5.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.4	0.4	m3/yr
1996:	0.4	0.4	m3/yr
1997:	0.4	0.4	m3/ry
1998-2002:	0.4	0.4	m3/yr
2003-2022:	0.4	0.4	m3/yr

TYPICAL EPA CODES APPLICABLE

D001
D002
D003
D006
D008
D009
D040

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.59E+00	Curies/m3
Cm244	3.03E+00	Curies/m3
Pu238	2.46E+00	Curies/m3
Pu239	2.06E+00	Curies/m3
Pu240	9.26E-01	Curies/m3
Pu241	2.83E+01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** LL

WASTE STREAM

MWIR ID

WIPP ID LL-T001

Local ID Form 2 Non-mixed

MATRIX CODE

SITE FINAL FORM IDC

STREAM NAME *Solidified Waste (Form 2)*

DESCRIPTION More than 50 volume percent of this waste consists of solidified water-based or oil-based liquids or solidified fine particles. The remaining waste consists of glovebox bagout waste, laboratory trash and some contaminated equipment.

Waste Matrix Code Group Solidified Inorganics

Site Matrix Description 50 to 90% of this waste matrix consists of liquids solidified in 1 to 5 gallon plastic containers using Portland cement or Aquaset for the water based liquids and Envirostone or Petroset for the oil-based liquids. The remainder consists of glovebox waste similar to form 1 waste. The waste does not contain any RCRC listed hazardous materials.

NO MIGRATION VARIANCE PETITION ASSIGNMENT *LL 111*

TRUCON CODE *LL 111*

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		*Suspect Mixed TRU*		*Residues*			*Other*	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

Footnotes

The TRUCON and NMVP assignments for the waste stream only applies to the solidified inorganics in the waste stream.

000569

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL **WASTE TYPE** TRU **HANDLING** CH **GENERATOR SITE** LL

LL-T001 **CONTAINER:** Drum **Type/Size:** 55-gallon

Container Matl: steel **Int. Vol/Ctnr:** 0.208 m3

Liner Type: rigid **Liner Material:** HDPE

Number Stored: 60 **Number Projected:** 287

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	30.0	0.0	100.0
Aluminum-Based Metals/Alloys	5.0	0.0	50.0
Other Metals	1.0	0.0	20.0
Other Inorganic Materials	1.0	0.0	20.0
Cellulosics	10.0	0.0	100.0
Rubber	1.0	0.0	20.0
Plastics	20.0	5.0	100.0
Solidified, Inorganic matrix	100.0	50.0	365.0
Solidified, Organic matrix	100.0	50.0	365.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	144.0		
Packaging Material, Plastic	33.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	10.2	10.2	m3
End of 1993:	12.5	12.5	m3
1994:	1.5	1.5	m3/yr
1995:	2.1	2.1	m3/yr
1996:	2.1	2.1	m3/yr
1997:	2.1	2.1	m3/ry
1998-2002:	2.1	2.1	m3/yr
2003-2022:	2.1	2.1	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	9.09E-01	Curies/m3
Pu239	1.40E+00	Curies/m3
Pu240	6.32E-01	Curies/m3
Pu241	1.95E+01	Curies/m3

Comments

Content weight is limited to 76 kg or 365 kg/m3.
All weights are estimates based on process knowledge.
Drum weight averages 30 kg of steel.
Liner + liner bag averages 7 kg of polyethylene.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** LL

WASTE STREAM

MWIR ID	
WIPP ID	LL-T002
Local ID	Form 1 Non-Mixed
MATRIX CODE	
SITE FINAL FORM IDC	

STREAM NAME R&D Glovebox Waste (Form 1)

DESCRIPTION The waste consists of glovebox bagout waste, laboratory trash and some contaminated equipment. The waste may occasionally include small quantities of solidified liquids, but these are usually segregated as waste form 2.

Waste Matrix Code Group Combustible

Site Matrix Description The waste consists mostly of untreated dry solids such as tissues, paper, assorted plastics, glassware, ceramics, and metals. Portland cement or Aquaset is used to solidify small amounts of water-based liquids; Envirostone or Petroset is used to solidify small amounts of solvents and oil-based liquids. The composition varies considerably, but it is predominantly organics (> 90% by weight). The waste does not contain any RCRA listed hazardous materials.

NO MIGRATION VARIANCE PETITION ASSIGNMENT LL 116

TRUCON CODE LL 116

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

170005

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** LL

LL-T002 **CONTAINER:** Drum **Type/Size:** 55-gallon

Container Matl: steel **Int. Vol/Ctnr:** 0.208 m3

Liner Type: rigid **Liner Material:** HDPE

Number Stored: 210 **Number Projected:** 1736

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	5.0	0.0	365.0
Aluminum-Based Metals/Alloys	5.0	0.0	365.0
Other Metals	2.0	0.0	365.0
Other Inorganic Materials	1.0	0.0	200.0
Cellulosics	100.0	0.0	365.0
Rubber	5.0	0.0	200.0
Plastics	100.0	5.0	365.0
Solidified, Inorganic matrix	5.0	0.0	100.0
Solidified, Organic matrix	5.0	0.0	100.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	144.0		
Packaging Material, Plastic	33.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	34.5	34.5	m3
End of 1993:	43.7	43.7	m3
1994:	11.2	11.2	m3/yr
1995:	12.5	12.5	m3/yr
1996:	12.5	12.5	m3/yr
1997:	12.5	12.5	m3/ry
1998-2002:	12.5	12.5	m3/yr
2003-2022:	12.5	12.5	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.79E+00	Curies/m3
Pu238	3.24E-01	Curies/m3
Pu239	2.50E+00	Curies/m3
Pu240	1.03E+00	Curies/m3
Pu241	3.17E+01	Curies/m3

Comments

Content weight is limited to 76 kg or 365 kg/m3.
All weights are estimated based on process knowledge.
Drum weight averages 30 kg of steel.
Liner + liner bag averages 7 kg of polyethylene.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** LL

WASTE STREAM MWIR ID	
WIPP ID	LL-T003
Local ID	Form 3 non-mixed
MATRIX CODE	
SITE FINAL FORM IDC	
STREAM NAME	*Combined metal scrap & incidental combust (Form 3)*
DESCRIPTION	This waste consists of contaminated equipment and laboratory trash too big to fit into 55 gallon drums. This waste does not contain RCRA hazardous materials.
Waste Matrix Code Group	Uncategorized Metal
Site Matrix Description	This waste consists mostly of metal scrap such as desommissioned gloveboxes, hoods, and other large equipment as well as laboratory trash. Typically it will contain metal components, glassware, ceramics, plastics, paper, and wood. It will be mostly inorganic materials, but can vary widely. This waste does not contain RCRA listed hazardous materials.

NO MIGRATION VARIANCE PETITION ASSIGNMENT LL 125 **TRUCON CODE** LL 125

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

0005173

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL

WASTE TYPE TRU HANDLING CH GENERATOR SITE LL

LL-T003 **CONTAINER:** Rogers Chem Box #2
Type/Size:

Container Matl: Steel
Int. Vol/Ctnr: 5.646 m3

Liner Type: None
Liner Material:

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	100.0	0.0	140.0
Aluminum-Based Metals/Alloys	15.0	0.0	140.0
Other Metals	10.0	0.0	30.0
Other Inorganic Materials	2.0	0.0	10.0
Cellulosics	5.0	0.0	15.0
Rubber	1.0	0.0	5.0
Plastics	2.0	0.0	10.0
Solidified, Inorganic matrix	1.0	0.0	3.0
Solidified, Organic matrix	1.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	146.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	5.6	5.6	m3
End of 1993:	5.6	5.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	3.00E-04	Curies/m3
Pu239	2.50E-03	Curies/m3
Pu240	6.00E-04	Curies/m3
Pu241	1.67E-02	Curies/m3

Comments

These estimates are based on the content weight for this container. Approximate weight for plastic bags is used in the packaging material/plastic field.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL

WASTE TYPE TRU HANDLING CH GENERATOR SITE LL

LL-T003

CONTAINER: Capital Indus. Box #1
Type/Size:

Container Matl: Steel
Int. Vol/Ctnr: 3.811 m3

Liner Type: None
Liner Material:

Number Stored: 2
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	200.0	0.0	30.0
Aluminum-Based Metals/Alloys	3.0	0.0	30.0
Other Metals	1.0	0.0	30.0
Other Inorganic Materials	1.0	0.0	5.0
Cellulosics	1.0	0.0	5.0
Rubber	1.0	0.0	5.0
Plastics	1.0	0.0	20.0
Solidified, Inorganic matrix	0.0	0.0	5.0
Solidified, Organic matrix	0.0	0.0	5.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	160.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	7.6	7.6	m3
End of 1993:	7.6	7.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	4.00E-04	Curies/m3
Pu239	3.00E-03	Curies/m3
Pu240	7.00E-04	Curies/m3
Pu241	1.99E-02	Curies/m3

Comments

These estimates are based on the content weight for this container. Approximate weight for plastic bags is used in the packaging material/plastic field.

00575

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL

WASTE TYPE TRU HANDLING CH GENERATOR SITE LL

LL-T003 CONTAINER: Capital Indus. Box #2 Type/Size:

Container Matl: Steel Int. Vol/Ctnr: 4.003 m3

Liner Type: None Liner Material:

Number Stored: 15 Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	300.0	100.0	390.0
Aluminum-Based Metals/Alloys	40.0	0.0	200.0
Other Metals	20.0	0.0	40.0
Other Inorganic Materials	10.0	0.0	20.0
Cellulosics	10.0	0.0	30.0
Rubber	5.0	0.0	10.0
Plastics	5.0	0.0	20.0
Solidified, Inorganic matrix	2.0	0.0	10.0
Solidified, Organic matrix	2.0	0.0	10.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	156.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	60.1	60.1	m3
End of 1993:	60.1	60.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.90E-03	Curies/m3
Pu239	2.45E-02	Curies/m3
Pu240	5.70E-03	Curies/m3
Pu241	1.99E-01	Curies/m3

Comments

These estimates are based on the content weight for this container. Approximate weight for plastic bags is used in the packaging material/plastic field.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL | **WASTE TYPE** TRU | **HANDLING** CH | **GENERATOR SITE** LL

LL-T003 | **CONTAINER:** Rogers Chem. Box #1 | **Type/Size:** | **Container Matl:** Steel | **Int. Vol/Ctnr:** 4.247 m3 | **Liner Type:** None | **Liner Material:** | **Number Stored:** 1 | **Number Projected:** 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	100.0	0.0	140.0
Aluminum-Based Metals/Alloys	15.0	0.0	140.0
Other Metals	10.0	0.0	30.0
Other Inorganic Materials	2.0	0.0	10.0
Cellulosics	5.0	0.0	15.0
Rubber	1.0	0.0	5.0
Plastics	2.0	0.0	10.0
Solidified, Inorganic matrix	1.0	0.0	3.0
Solidified, Organic matrix	1.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	109.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4.2	4.2	m3
End of 1993:	4.2	4.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.45E-02	Curies/m3
Pu239	3.78E-02	Curies/m3
Pu240	8.70E-03	Curies/m3
Pu241	2.54E-01	Curies/m3

Comments

These estimates are based on the content weight for this container. Approximate weight for plastic bags is used in the packaging material/plastic field.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL

WASTE TYPE TRU HANDLING CH GENERATOR SITE LL

LL-T003 CONTAINER: Rogers Chem. Box #3 Type/Size:

Container Matl: Steel Int. Vol/Ctnr: 5.753 m3

Liner Type: None Liner Material:

Number Stored: 1 Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	35.0	0.0	45.0
Aluminum-Based Metals/Alloys	5.0	0.0	45.0
Other Metals	3.0	0.0	20.0
Other Inorganic Materials	2.0	0.0	10.0
Cellulosics	2.0	0.0	10.0
Rubber	1.0	0.0	5.0
Plastics	1.0	0.0	10.0
Solidified, Inorganic matrix	1.0	0.0	3.0
Solidified, Organic matrix	1.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	158.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	5.8	5.8	m3
End of 1993:	5.8	5.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	3.00E-04	Curies/m3
Pu239	2.40E-03	Curies/m3
Pu240	6.00E-04	Curies/m3
Pu241	1.62E-02	Curies/m3

Comments

These estimates are based on the content weight for this container. Approximate weight for plastic bags is used in the packaging material/plastic field.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL **WASTE TYPE** TRU **HANDLING** CH **GENERATOR SITE** LL

LL-T003 **CONTAINER:** Capital Indus. Box #3 **Type/Size:**

Container Mat'l: Steel **Int. Vol/Ctnr:** 6.385 m3

Liner Type: None **Liner Material:**

Number Stored: 1 **Number Projected:** 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	35.0	0.0	45.0
Aluminum-Based Metals/Alloys	5.0	0.0	45.0
Other Metals	3.0	0.0	20.0
Other Inorganic Materials	2.0	0.0	10.0
Cellulosics	2.0	0.0	10.0
Rubber	1.0	0.0	5.0
Plastics	1.0	0.0	10.0
Solidified, Inorganic matrix	1.0	0.0	3.0
Solidified, Organic matrix	1.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	111.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	6.4	6.4	m3
End of 1993:	6.4	6.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am2441	4.00E-04	Curies/m3
Pu238	3.20E-03	Curies/m3
Pu240	7.00E-04	Curies/m3
Pu241	2.18E-02	Curies/m3

Comments

These estimates are based on the content weight for this container. Approximate weight for plastic bags is used in the packaging material/plastic field.

000579

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL | **WASTE TYPE** TRU | **HANDLING** CH | **GENERATOR SITE** LL

LL-T003 | **CONTAINER:** Capital Indus. Box #4 | **Type/Size:** | **Container Matl:** Steel | **Int. Vol/Ctnr:** 7.495 m3 | **Liner Type:** None | **Liner Material:** | **Number Stored:** 1 | **Number Projected:** 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	35.0	0.0	45.0
Aluminum-Based Metals/Alloys	5.0	0.0	45.0
Other Metals	3.0	0.0	20.0
Other Inorganic Materials	2.0	0.0	10.0
Cellulosics	2.0	0.0	10.0
Rubber	1.0	0.0	5.0
Plastics	1.0	0.0	10.0
Solidified, Inorganic matrix	1.0	0.0	3.0
Solidified, Organic matrix	1.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	145.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	7.5	7.5	m3
End of 1993:	7.5	7.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	9.70E-03	Curies/m3
Pu238	9.40E-03	Curies/m3
Pu239	1.40E-02	Curies/m3
Pu240	7.00E-03	Curies/m3
Pu241	2.11E-01	Curies/m3

Comments

These estimates are based on the content weight for this container. Approximate weight for plastic bags is used in the packaging material/plastic field.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** LL

WASTE STREAM
MWIR ID
WIPP ID LL-T003 Contd
Local ID Form 3 non-mixed

STREAM NAME Combined metal scrap & incidental combust (Form 3)

DESCRIPTION This waste consists of contaminated equipment and laboratory trash too big to fit into 55 gallon drums. This waste does not contain RCRA hazardous materials.

MATRIX CODE

SITE FINAL FORM IDC

Waste Matrix Code Group *Uncategorized Metal*

Site Matrix Description This waste consists mostly of metal scrap such as desommissioned gloveboxes, hoods, and other large equipment as well as laboratory trash. Typically it will contain metal components, glassware, ceramics, plastics, paper, and wood. It will be mostly inorganic materials, but can vary widely. This waste does not contain RCRA listed hazardous materials.

NO MIGRATION VARIANCE PETITION ASSIGNMENT LL 125

TRUCON CODE LL 125

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000581

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL

WASTE TYPE TRU HANDLING CH GENERATOR SITE LL

LL-T003 Con **CONTAINER:** Standard Waste Box
Type/Size:

Container Matl: Steel
Int. Vol/Ctnr: 1.9 m3

Liner Type: None
Liner Material:

Number Stored: 2
Number Projected: 116

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	150.0	0.0	800.0
Aluminum-Based Metals/Alloys	20.0	0.0	800.0
Other Metals	10.0	0.0	800.0
Other Inorganic Materials	5.0	0.0	800.0
Cellulosics	5.0	0.0	500.0
Rubber	2.0	0.0	100.0
Plastics	3.0	2.0	200.0
Solidified, Inorganic matrix	2.0	0.0	300.0
Solidified, Organic matrix	2.0	0.0	300.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	153.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3.8	3.8	m3
End of 1993:	3.8	3.8	m3
1994:	7.6	7.6	m3/yr
1995:	7.6	7.6	m3/yr
1996:	7.6	7.6	m3/yr
1997:	7.6	7.6	m3/ry
1998-2002:	7.6	7.6	m3/yr
2003-2022:	7.6	7.6	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.35E-01	Curies/m3
Pu238	7.02E-02	Curies/m3
Pu239	9.92E-02	Curies/m3
Pu240	8.02E-02	Curies/m3
Pu241	2.45E+00	Curies/m3

Comments

These estimates are based on the content weight for this container. Approximate weight for plastic bags is used in the packaging material/plastic field.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE LL

LL-T003 Con CONTAINER: Rogers Chem. Box #4
Type/Size:
Container Matl: Steel | Int. Vol/Ctnr: 7.588 m3
Liner Type: None | Liner Material: None
Number Stored: 1 | Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	35.0	0.0	45.0
Aluminum-Based Metals/Alloys	5.0	0.0	45.0
Other Metals	3.0	0.0	20.0
Other Inorganic Materials	2.0	0.0	10.0
Cellulosics	2.0	0.0	10.0
Rubber	1.0	0.0	5.0
Plastics	1.0	0.0	10.0
Solidified, Inorganic matrix	1.0	0.0	3.0
Solidified, Organic matrix	1.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	110.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	7.6	7.6	m3
End of 1993:	7.6	7.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.40E-04	Curies/m3
Pu239	1.18E-03	Curies/m3
Pu240	2.70E-04	Curies/m3
Pu241	7.94E-03	Curies/m3

Comments

These estimates are based on the content weight for this container. Approximate weight for plastic bags is used in the packaging material/plastic field.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL

WASTE TYPE TRU HANDLING CH GENERATOR SITE LL

LL-T003 Con CONTAINER: Rogers Chem. Box #5
Type/Size:

Container Mat'l: Steel
Int. Vol/Ctnr: 8.306 m3

Liner Type: None
Liner Material:

Number Stored: 3
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	150.0	0.0	200.0
Aluminum-Based Metals/Alloys	20.0	0.0	100.0
Other Metals	10.0	0.0	100.0
Other Inorganic Materials	5.0	0.0	20.0
Cellulosics	5.0	0.0	50.0
Rubber	2.0	0.0	10.0
Plastics	3.0	0.0	50.0
Solidified, Inorganic matrix	2.0	0.0	10.0
Solidified, Organic matrix	2.0	0.0	10.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	24.9	24.9	m3
End of 1993:	24.9	24.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	3.90E-03	Curies/m3
Pu239	3.28E-02	Curies/m3
Pu240	7.60E-03	Curies/m3
Pu241	2.21E-01	Curies/m3

Comments

These estimates are based on the content weight for this container. Approximate weight for plastic bags is used in the packaging material/plastic field.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL **WASTE TYPE** TRU **HANDLING** CH **GENERATOR SITE** LL

LL-T003 Con **CONTAINER:** Rogers Chem. Box #6
Type/Size:
Container Matl: Steel
Int. Vol/Ctnr: 8.92 m3
Liner Type: None
Liner Material:
Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	125.0	0.0	170.0
Aluminum-Based Metals/Alloys	20.0	0.0	100.0
Other Metals	10.0	0.0	50.0
Other Inorganic Materials	5.0	0.0	20.0
Cellulosics	5.0	0.0	30.0
Rubber	2.0	0.0	10.0
Plastics	3.0	0.0	30.0
Solidified, Inorganic matrix	2.0	0.0	5.0
Solidified, Organic matrix	2.0	0.0	5.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	126.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	8.9	8.9	m3
End of 1993:	8.9	8.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.22E+02	Curies/m3
Pu239	1.02E-01	Curies/m3
Pu240	2.35E-02	Curies/m3
Pu241	6.87E-01	Curies/m3

Comments

These estimates are based on the content weight for this container. Approximate weight for plastic bags is used in the packaging material/plastic field.

0000585

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL | **WASTE TYPE** TRU | **HANDLING** CH | **GENERATOR SITE** LL

WASTE STREAM MWIR ID		**STREAM NAME**	Pyrochemical salt waste (Form 4)
WIPP ID	LL-T004	**DESCRIPTION**	The waste consists of used chloride and fluoride salts from pyrochemical processes such as electrorefining, molten salt extraction, and direct oxide reduction.
Local ID	Form 4 non-mixed		
MATRIX CODE			
SITE FINAL FORM IDC			

Waste Matrix Code Group Salt Waste

Site Matrix 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.

NO MIGRATION VARIANCE PETITION ASSIGNMENT LL 124 | **TRUCON CODE** LL 124

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL **WASTE TYPE** TRU **HANDLING** CH **GENERATOR SITE** LL

LL-T004 **CONTAINER:** Drum
Type/Size: 55-gallon

Container Matl: Steel **Int. Vol/Ctnr:** 0.208 m3
Liner Type: rigid **Liner Material:** HDPE
Number Stored: 3 **Number Projected:** 14

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	20.0	0.0	100.0
Aluminum-Based Metals/Alloys	5.0	0.0	80.0
Other Metals	2.0	0.0	50.0
Other Inorganic Materials	290.0	100.0	365.0
Cellulosics	2.0	0.0	50.0
Rubber	1.0	0.0	20.0
Plastics	20.0	5.0	100.0
Solidified, Inorganic matrix	1.0	0.0	10.0
Solidified, Organic matrix	1.0	0.0	10.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	144.0		
Packaging Material, Plastic	33.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.2	m3
End of 1993:	0.6	0.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.1	0.1	m3/yr
1996:	0.1	0.1	m3/yr
1997:	0.1	0.1	m3/ry
1998-2002:	0.1	0.1	m3/yr
2003-2022:	0.1	0.1	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.81E+00	Curies/m3
Pu238	4.74E-01	Curies/m3
Pu239	2.06E+00	Curies/m3
Pu240	1.66E+00	Curies/m3
Pu241	5.10E+01	Curies/m3

Comments

Content weight is limited to 76 kg or 365 kg/m3.
All weights are estimates based on process knowledge.
Drum weight averages 30 kg of steel.
Liner + liner bag averages 7 kg of polyethylene.

4.9.0753

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL | **WASTE TYPE** TRU | **HANDLING** CH | **GENERATOR SITE** LL

WASTE STREAM MWIR ID		**STREAM NAME**	HEPA filters (Form 5)
WIPP ID	LL-T005		
Local ID	Form 5 non-mixed	**DESCRIPTION**	HEPA filters
MATRIX CODE			
SITE FINAL FORM IDC			
Waste Matrix Code Group	Filter		

Site Matrix Description The waste matrix is mostly wood framed HEPA filters although some small metal cased HEPA filters are also included. Some of the filters contain asbestos making them California mixed waste.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	X
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000588

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE LL

LL-T005

CONTAINER: Capital Indus. Box
Type/Size:

Container Mat'l: Steel
Int. Vol/Ctnr: 4.003 m3

Liner Type: None
Liner Material:

Number Stored: 4
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	65.0	0.0	130.0
Aluminum-Based Metals/Alloys	20.0	0.0	40.0
Other Metals	10.0	0.0	20.0
Other Inorganic Materials	20.0	0.0	40.0
Cellulosics	65.0	0.0	130.0
Rubber	10.0	0.0	20.0
Plastics	20.0	5.0	40.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	109.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	16.0	16.0	m3
End of 1993:	16.0	16.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	8.00E-03	Curies/m3
Pu239	6.50E-02	Curies/m3
Pu240	1.50E-02	Curies/m3
Pu241	4.40E-01	Curies/m3

Comments

Based on composition of typical HEPA filter.
Approximate weight for plastic bags is used in the packaging material/plastic field.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL | **WASTE TYPE** TRU | **HANDLING** CH | **GENERATOR SITE** LL

LL-T005 | **CONTAINER: Type/Size:** Standard Waste Box | **Container Matl:** Steel | **Int. Vol/Ctnr:** 1.9 m3 | **Liner Type:** None | **Liner Material:** | **Number Stored:** 0 | **Number Projected:** 14

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	65.0	0.0	130.0
Aluminum-Based Metals/Alloys	20.0	0.0	40.0
Other Metals	10.0	0.0	20.0
Other Inorganic Materials	20.0	0.0	40.0
Cellulosics	65.0	0.0	130.0
Rubber	10.0	0.0	20.0
Plastics	20.0	5.0	40.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	153.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	1.0	1.0	m3/yr
1996:	1.0	1.0	m3/yr
1997:	1.0	1.0	m3/ry
1998-2002:	1.0	1.0	m3/yr
2003-2022:	1.0	1.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	8.00E-03	Curies/m3
Pu239	6.50E-02	Curies/m3
Pu240	1.50E-02	Curies/m3
Pu241	4.40E-01	Curies/m3

Comments

Maximum content weight for a SWB is 1520 kg or 800 kg/m3.
Other metals is based on composition of typical HEPA filter.
Aproximate weight for plastic bags is used for packaging material/plasitc field.

000530

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL

WASTE TYPE TRU HANDLING CH GENERATOR SITE LL

LL-T005

CONTAINER:	Drum	Container Mat'l:	Steel	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	HDPE

Number Stored: 3
Number Projected: 29

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	75.0	0.0	150.0
Aluminum-Based Metals/Alloys	25.0	0.0	50.0
Other Metals	10.0	0.0	20.0
Other Inorganic Materials	25.0	0.0	50.0
Cellulosics	70.0	0.0	100.0
Rubber	10.0	0.0	20.0
Plastics	25.0	5.0	100.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	144.0		
Packaging Material, Plastic	33.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.4	m3
End of 1993:	0.6	0.6	m3
1994:	0.2	0.2	m3/yr
1995:	0.2	0.2	m3/yr
1996:	0.2	0.2	m3/yr
1997:	0.2	0.2	m3/ry
1998-2002:	0.2	0.2	m3/yr
2003-2022:	0.2	0.2	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Cm244	4.14E+00	Curies/m3
Am241	5.09E-01	Curies/m3
Pu238	1.68E-01	Curies/m3
Pu239	2.28E-01	Curies/m3
Pu240	1.84E-01	Curies/m3
Pu241	5.64E+00	Curies/m3

Comments

Content weight is limited to 76 kg or 365 kg/m3.
Weights based on typical HEPA filters.
Drum weight averages 30 kg of steel.
Liner + liner bag averages 7 kg of polyethylene.

1003

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE LL

WASTE STREAM MWIR ID LL-W018
WIPP ID LL-W018
Local ID Form 3 mixed

MATRIX CODE

SITE FINAL FORM IDC

STREAM NAME Combined metal scrap & incidental combust.(Form 3)

DESCRIPTION This waste consists of contaminated equipment and laboratory trash too big to fit in 55 gallon drums. This waste does contain RCRA hazardous materials.

Waste Matrix Code Group: Uncategorized Metal

Site Matrix Description: The waste consists mostly of metal scrap such as decommissioned gloveboxes, hoods and other large equipment as well as laboratory trash. Typically it will contain metal components, glassware, ceramics, plastics, paper, and wood. It will be mostly inorganic material, but can vary widely. This waste does contain RCRA listed hazardous materials such as solvents and lead shielding.

NO MIGRATION VARIANCE PETITION ASSIGNMENT LL 125

TRUCON CODE LL 125

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000502

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE LL

LL-W018 | **CONTAINER:** Standard Waste Box | Type/Size: | Container Matl: Steel | Int. Vol/Ctnr: 1.9 m3 | Liner Type: None | Liner Material: | Number Stored: 1 | Number Projected: 14

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	150.0	0.0	800.0
Aluminum-Based Metals/Alloys	20.0	0.0	800.0
Other Metals	10.0	0.0	800.0
Other Inorganic Materials	5.0	0.0	800.0
Cellulosics	5.0	0.0	500.0
Rubber	2.0	0.0	100.0
Plastics	20.0	5.0	200.0
Solidified, Inorganic matrix	2.0	0.0	300.0
Solidified, Organic matrix	2.0	0.0	300.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	153.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.9	1.9	m3
End of 1993:	1.9	1.9	m3
1994:	0.0	0.0	m3/yr
1995:	1.0	1.0	m3/yr
1996:	1.0	1.0	m3/yr
1997:	1.0	1.0	m3/ry
1998-2002:	1.0	1.0	m3/yr
2003-2022:	1.0	1.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008C

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.04E-02	Curies/m3
Pu239	8.78E-03	Curies/m3
Pu240	2.03E-02	Curies/m3
Pu241	5.94E-01	Curies/m3

Comments

Maximum content weight for a SWB is 1520 kg or 800 kg/m3.
All weights are estimates based on process knowledge.
Approximate weight for plastic bags is used in packaging material/plastic.

00593

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL **WASTE TYPE** MTRU **HANDLING** CH **GENERATOR SITE** LL

WASTE STREAM **MWIR ID** LL-W019 **STREAM NAME** Solidified Waste (Form 2)

WIPP ID LL-W019

Local ID Form 2 Mixed **DESCRIPTION** More than 50 volume percent of this waste consists of solidified water-based or oil-based liquids or solidified fine particles. The remaining waste consists of glovebox bagout waste, laboratory trash and some contaminated equipment.

MATRIX CODE

SITE FINAL FORM IDC

Waste Matrix Code Group Solidified Inorganics

Site Matrix Description 50 to 90% of this waste matrix consists of liquids solidified in 1 to 5 gallon plastic containers using Portland cement or Aquaset for the waster based liquids and Envirostone or Petroset for the oil-based liquids. The remainder consists of glovebox waste similar to form 1 waste. The waste does contain RCRA listed hazardous materials such as TCE and other solvents.

NO MIGRATION VARIANCE PETITION ASSIGNMENT LL 111 **TRUCON CODE** LL 111

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

Footnotes

The TRUCON and NMVP assignments for this waste stream only applies to the solidified inorganics in the waste stream.

00531

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME LL **WASTE TYPE** MTRU **HANDLING** CH **GENERATOR SITE** LL

LL-W019 **CONTAINER:** Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type: rigid
Liner Material: HDPE
Number Stored: 4
Number Projected: 31

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	30.0	0.0	100.0
Aluminum-Based Metals/Alloys	5.0	0.0	50.0
Other Metals	1.0	0.0	20.0
Other Inorganic Materials	1.0	0.0	20.0
Cellulosics	10.0	0.0	100.0
Rubber	1.0	0.0	20.0
Plastics	20.0	5.0	100.0
Solidified, Inorganic matrix	100.0	50.0	365.0
Solidified, Organic matrix	100.0	50.0	365.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	144.0		
Packaging Material, Plastic	33.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.6	0.6	m3
End of 1993:	0.8	0.8	m3
1994:	0.6	0.6	m3/yr
1995:	0.2	0.2	m3/yr
1996:	0.2	0.2	m3/yr
1997:	0.2	0.2	m3/ry
1998-2002:	0.2	0.2	m3/yr
2003-2022:	0.2	0.2	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.24E+00	Curies/m3
Pu239	7.89E-01	Curies/m3
Pu240	6.63E-01	Curies/m3
Pu241	2.01E+01	Curies/m3

TYPICAL EPA CODES APPLICABLE

D040
F002

Comments

Content weight is limited to 76 kg or 365 kg/m3.
All weights are estimates based on process knowledge.
Drum weight averaged 30 kg of steel.
Liner + liner bag averages 7 kg of polyethylene.

000595

Mound Plant

MOUND PLANT (MD)
WASTE STREAM PROFILES

The following modifications were made by the WTWBIR team in developing the MD waste stream profiles:

- MD Final Waste Form Groups were modified to be consistent with the nomenclature used in the WTWBID. These changes included word and spelling changes. The assigned Final Waste Form Groups are consistent with the information provided by MD.
- The WTWBIR team had to assign identification numbers (IDs) to those MD waste streams not given an identifier by the site.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

WASTE STREAM

MWIR ID

WIPP ID MD-M001

Local ID MD-805

MATRIX CODE 5250

SITE FINAL FORM IDC

STREAM NAME Asbestos Debris

DESCRIPTION Asbestos filters

Waste Matrix Code Group: Inorganic non-metal

Site Matrix Description: (24) Asbestos filters, (1) glass filter

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA	Asbestos	X
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

0060538

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

MD-M001 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: n/a
Liner Material:

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	200.0	150.0	300.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.2	m3
End of 1993:	0.2	0.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	3.00E-02	Curies/m3

Comments

Other inorganic materials - 1 drum asbestos and glass
Activity on Pu239 is less than this figure

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD | **WASTE TYPE** TRU | **HANDLING** CH | **GENERATOR SITE**

WASTE STREAM MWIR ID		**STREAM NAME**	Inorganic Process Residues
WIPP ID	MD-T001		
Local ID	MD-836	**DESCRIPTION**	Solidified TRU Sludge
MATRIX CODE	3121		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Solidified Inorganics		
Site Matrix Description	WD TRU sludge, batch #194		

NO MIGRATION VARIANCE PETITION ASSIGNMENT | **TRUCON CODE**

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste	X			
				Maintenance				

000600

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE

MD-T001

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: plastic

Number Stored: 23
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	811.3	811.3	811.3
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4.8	4.8	m3
End of 1993:	4.8	4.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.18E-01	Curies/m3

Comments

There are 23 drums of solidified TRU sludge. Each drum weighs approximately 172kg (net). Therefore, the upper and lower density limits are equal to the average.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** MD

WASTE STREAM	MWIR ID	
	WIPP ID	MD-T002
	Local ID	MD-827
MATRIX CODE		5310
SITE FINAL FORM IDC		

STREAM NAME Plastic/Rubber Debris

DESCRIPTION Plastic, rubber & some metal debris

Waste Matrix Code Group Combustible

Site Matrix Description Predominately plastic & rubber debris with some metal.

NO MIGRATION VARIANCE PETITION ASSIGNMENT MD 116A

TRUCON CODE MD 116A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE MD

MD-T002

CONTAINER:	Drum	Container Matl:	steel	Liner Type:	n/a
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	

Number Stored: 17
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	333.5	193.8	850.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3.5	3.5	m3
End of 1993:	3.5	3.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	7.21E+01	Curies/m3
Pu239	3.00E-02	Curies/m3

000603

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD | **WASTE TYPE** TRU | **HANDLING** CH | **GENERATOR SITE** MD

WASTE STREAM MWIR ID		**STREAM NAME**	Contaminated soil
WIPP ID	MD-T003	**DESCRIPTION**	TRU soil
Local ID	842DD000		
MATRIX CODE	4100		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Soils		
Site Matrix Description	Hillside hot spot #3 excavation		

NO MIGRATION VARIANCE PETITION ASSIGNMENT MD 111B

TRUCON CODE MD 111B

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste	X	Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration	X	Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD **WASTE TYPE** TRU **HANDLING** CH **GENERATOR SITE** MD

MD-T003 **CONTAINER:** Box **Type/Size:** Type 005

Container Matl: steel **Int. Vol/Ctnr:** 2.37 m3

Liner Type: n/a **Liner Material:**

Number Stored: 28 **Number Projected:** 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	394.4	372.8	415.7
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	66.4	66.4	m3
End of 1993:	66.4	66.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	4.01E-01	Curies/m3

Comments

There are approxaimtely 28 boxes of soil generated predominately from the hillside hot spot #3.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE MD

MD-T003

CONTAINER: Box
Type/Size: Type 004

Container Matl: steel
Int. Vol/Ctnr: 4.21 m3

Liner Type: n/a
Liner Material:

Number Stored: 12
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	387.3	338.9	408.5
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	50.5	50.5	m3
End of 1993:	50.5	50.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	2.26E-01	Curies/m3

Comments

There are 12 boxes of soil generated predominately from the hillside hot spot #3.

000606

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD | **WASTE TYPE** TRU | **HANDLING** CH | **GENERATOR SITE** MD

WASTE STREAM	MWIR ID	
	WIPP ID	MD-T004
	Local ID	MD-826
MATRIX CODE		8900
SITE FINAL FORM IDC		

STREAM NAME Uncategorized unknowns

DESCRIPTION Uncategorized TRU waste

Waste Matrix Code Group *Uncategorized metal*

Site Matrix Description Tank plate, tools, overpacked 17-C drums & HDPE liners

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues	X		Other	
Unknown		Unknown	X	Decon and Decommissioning	X		N/A	
				Environmental Restoration			Unknown	X
				From Treatment of Waste				
				Maintenance				

1009507

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **MD**

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE MD

MD-T004

CONTAINER:	Box	Container Matl:	steel	Liner Type:	n/a
Type/Size:	Type 004	Int. Vol/Ctnr:	4.21 m3	Liner Material:	

Number Stored: 4
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	358.1	177.6	538.7
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	16.8	16.8	m3
End of 1993:	16.8	16.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	7.80E-02	Curies/m3
Pu239	1.47E-03	Curies/m3

000603

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD

WASTE TYPE TRU HANDLING CH GENERATOR SITE MD

MD-T004 CONTAINER: Box
Type/Size: Type 003

Container Matl: steel
Int. Vol/Ctnr: 2.32 m3

Liner Type: n/a
Liner Material:

Number Stored: 2
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	532.9	451.6	604.1
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4.6	4.6	m3
End of 1993:	4.6	4.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.38E-01	Curies/m3
Pu239	2.60E-03	Curies/m3

C09000

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD

WASTE TYPE TRU HANDLING CH GENERATOR SITE MD

WASTE STREAM MWIR ID		**STREAM NAME**	Contaminated soils with debris
WIPP ID	MD-T005	**DESCRIPTION**	TRU soil with rock debris
Local ID	MD-842		
MATRIX CODE	4200		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Soils		
Site Matrix Description	SM-10 & Hillside hot spot #3 excavation.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT MD 111B

TRUCON CODE MD 111B

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	
				Environmental Restoration	X		Unknown	X
				From Treatment of Waste				
				Maintenance				

019000

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD

WASTE TYPE TRU HANDLING CH GENERATOR SITE MD

MD-T005 CONTAINER: Box
Type/Size: Type 005

Container Matl: steel
Int. Vol/Ctnr: 2.37 m3

Liner Type: n/a
Liner Material:

Number Stored: 2
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	408.0	408.0	408.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4.7	4.7	m3
End of 1993:	4.7	4.7	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	7.00E-02	Curies/m3

Comments

There are 2 boxes containing soil mixed with florco absorbent from the hillside hot spot spa 3 excavation.

611

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE MD

MD-T005

CONTAINER:	Box	Container Matl:	steel	Liner Type:	n/a
Type/Size:	Type 004	Int. Vol/Ctnr:	4.21 m3	Liner Material:	

Number Stored: 6
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	275.3	17.8	403.9
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	25.3	25.3	m3
End of 1993:	25.3	25.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	7.00E-02	Curies/m3

Comments

There are 6 boxes containing soil & rock from SM-10.

000612

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE MD

WASTE STREAM MWIR ID	
WIPP ID	MD-T006
Local ID	MD-824
MATRIX CODE	5110
SITE FINAL FORM IDC	
STREAM NAME	Metal debris w/o lead or cadmium
DESCRIPTION	D&D metal debris
Waste Matrix Code Group	Uncategorized Metal
Site Matrix Description	Metal debris from D&D of Bldgs. 38-10 & 13, SM-10 & 25, R-120 & 149 and wts.

NO MIGRATION VARIANCE PETITION ASSIGNMENT MD 117A

TRUCON CODE MD 117A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000613

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE MD

MD-T006

CONTAINER: Box
Type/Size: Type 008

Container Matl: steel
Int. Vol/Ctnr: 3.16 m3

Liner Type: n/a
Liner Material:

Number Stored: 2
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	484.3	329.4	654.4
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	6.3	6.3	m3
End of 1993:	6.3	6.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	5.38E-01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD

WASTE TYPE TRU HANDLING CH GENERATOR SITE MD

MD-T006 CONTAINER: Box
Type/Size: Type 004

Container Matl: steel
Int. Vol/Ctnr: 4.21 m3

Liner Type: n/a
Liner Material:

Number Stored: 11
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	508.6	252.0	631.8
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	46.3	46.3	m3
End of 1993:	46.3	46.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	4.04E-01	Curies/m3

000615

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD

WASTE TYPE TRU HANDLING CH GENERATOR SITE MD

MD-T006 CONTAINER: Box
Type/Size: Type 003

Container Matl: steel
Int. Vol/Ctnr: 2.32 m3

Liner Type: n/a
Liner Material:

Number Stored: 3
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	550.2	391.0	680.6
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	7.0	7.0	m3
End of 1993:	7.0	7.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	4.31E-01	Curies/m3

0019003

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE MD

WASTE STREAM	MWIR ID		STREAM NAME: Uncategorized metal debris
	WIPP ID	MD-T007	
	Local ID	MD-825	DESCRIPTION: TRU metal debris
MATRIX CODE		5190	
SITE FINAL FORM IDC			

Waste Matrix Code Group: Uncategorized Metal

Site Matrix Description: Miscellaneous equipment - hood line trash.

NO MIGRATION VARIANCE PETITION ASSIGNMENT:

TRUCON CODE:

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	
				Environmental Restoration		Unknown	X
				From Treatment of Waste			
				Maintenance			

000617

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD

WASTE TYPE TRU HANDLING CH GENERATOR SITE MD

MD-T007

CONTAINER:	Drum	Container Mat'l:	steel	Liner Type:	n/a
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	

Number Stored: 24
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	380.0	0.0	480.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	5.0	0.0	200.0
Cellulosics	10.0	0.0	340.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE - ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	5.0	5.0	m3
End of 1993:	5.0	5.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	5.00E+01	Curies/m3
Pu239	3.00E-02	Curies/m3
U233	5.00E-02	Curies/m3

Comments

Other inorganic materials - glass
Cellulosics - burnable paper & rags
Activity on Pu239 is less than this figure

4100213

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD

WASTE TYPE TRU HANDLING CH GENERATOR SITE MD

WASTE STREAM MWIR ID		STREAM NAME	Uncategorized plastics/rubber debris
WIPP ID	MD-T008		
Local ID	MD-804	DESCRIPTION	Uncategorized plastics/rubber debris
MATRIX CODE	5319		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Combustible		
Site Matrix Description	Plastic and rubber debris from Bldg. 38, Room 149		

NO MIGRATION VARIANCE PETITION ASSIGNMENT TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	X
Unknown		Unknown	X	Decon and Decommissioning	X		N/A	
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000619

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD   WASTE TYPE TRU   HANDLING CH   GENERATOR SITE MD

MD-T008

CONTAINER:	Drum	Container Matl:	steel	Liner Type:	n/a
Type/Size:	Type 001	Int. Vol/Ctnr:	0.208 m3	Liner Material:	

Number Stored: 7
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	228.1	211.5	246.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.5	1.5	m3
End of 1993:	1.5	1.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	6.59E+01	Curies/m3

0:9000

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** MD

WASTE STREAM MWIR ID	
WIPP ID	MD-T009
Local ID	MD. 801+804
MATRIX CODE	5390
SITE FINAL FORM IDC	
STREAM NAME	Uncategorized combustible debris
DESCRIPTION	Uncategorized combustible debris
Waste Matrix Code Group	Combustible
Site Matrix Description	Uncategorized combustible debris

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown	X	Unknown	X	Decon and Decommissioning	X		N/A	
				Environmental Restoration			Unknown	X
				From Treatment of Waste				
				Maintenance				

000621

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD WASTE TYPE TRU HANDLING CH GENERATOR SITE MD

MD-T009 CONTAINER: Drum
Type/Size: Type 001
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type: n/a
Liner Material:
Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	50.0	50.0	50.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.2	m3
End of 1993:	0.2	0.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	3.10E+01	Curies/m3
Pu239	8.84E+00	Curies/m3

0062

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD | **WASTE TYPE** TRU | **HANDLING** CH | **GENERATOR SITE** MD

WASTE STREAM MWIR ID		**STREAM NAME**	*Composite filters*
WIPP ID	MD-T010		
Local ID	MD-825	**DESCRIPTION**	Glass + metal filters, cans-glass
MATRIX CODE	5410		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Heterogeneous		
Site Matrix Description	*Filters from Bldgs. 38-113*		

NO MIGRATION VARIANCE PETITION ASSIGNMENT | **TRUCON CODE**

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	*Operations Waste*			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000623

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE MD

MD-T010 CONTAINER: Drum
Type/Size: 55-gallon

Container Mat'l: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: n/a
Liner Material:

Number Stored: 2
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	200.0	50.0	350.0
Aluminum-Based Metals/Alloys	100.0	5.0	200.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	200.0	50.0	350.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	100.0	10.0	150.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.4	m3
End of 1993:	0.4	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.60E+00	Curies/m3
Pu238	3.00E-02	Curies/m3

Comments

Iron-based metal - fractions of metal, glass are estimated.
Soils - filters media is used.
Activities on Pu238 and Pu239 are both less than these figures.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** MD

WASTE STREAM

MWIR ID	
WIPP ID	MD-T011
Local ID	MD824
MATRIX CODE	5420
SITE FINAL FORM IDC	

STREAM NAME Predominately metal debris

DESCRIPTION Sheet metal, piping, chair, conduit, glovebox

Waste Matrix Code Group Uncategorized Metal

Site Matrix Description Scrap from Bldg. R-140, PP-10, PP-16, R-149, 38-10

NO MIGRATION VARIANCE PETITION ASSIGNMENT MD 117A

TRUCON CODE MD 117A

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000625

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE MD

MD-T011

CONTAINER:	Box	Container Matl:	Steel	Liner Type:	n/a
Type/Size:	Type 008	Int. Vol/Ctnr:	3.16 m3	Liner Material:	

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	300.0	200.0	438.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3.2	3.2	m3
End of 1993:	3.2	3.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	6.00E-01	Curies/m3

Comments

Iron-based metal - "scrap" unknown material parameter
Pu238 activity is less than this amount.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE MD

MD-T011 CONTAINER: Box | Type/Size: Type 004 | Container Matl: Steel | Int. Vol/Ctnr: 4.21 m3 | Liner Type: n/a | Liner Material: | Number Stored: 3 | Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	250.0	200.0	300.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	12.6	12.6	m3
End of 1993:	12.6	12.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.00E-02	Curies/m3

Comments

Iron-based metal - metal assumed to be iron-based.
"Misc. waste" unknown material parameters.

000627

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE MD

MD-T011

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: n/a
Liner Material:

Number Stored: 2
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

Comments

Drum weights not known.

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.4	m3
End of 1993:	0.4	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	4.00E+00	Curies/m3

000628

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** MD

WASTE STREAM

MWIR ID	
WIPP ID	MD-T012
Local ID	MD-825
MATRIX CODE	5490
SITE FINAL FORM IDC	
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	Bldg. PP-113, R-140
STREAM NAME	Uncategorized heterogeneous debris
DESCRIPTION	Metal, glass, asbestos filters

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	X
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown	X	Decon and Decommissioning	X		N/A	
				Environmental Restoration			Unknown	X
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE MD

MD-T012

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type: unknown
Liner Material:
Number Stored: 3
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	205.0	10.0	400.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	50.0	10.0	100.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.6	0.6	m3
End of 1993:	0.6	0.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	3.00E-02	Curies/m3

Comments

Iron-based metals - average is mid point
Aluminum-based metals - possible
Solidified, organic matrix - "CO3" 30 gallon in liner
Pu239 activity is less than this amount

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD | **WASTE TYPE** TRU | **HANDLING** CH | **GENERATOR SITE** MD

WASTE STREAM MWIR ID		**STREAM NAME**	Leaded gloves/aprons
WIPP ID	MD-T013	**DESCRIPTION**	Leaded gloves/aprons
Local ID			
MATRIX CODE	5311		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Combustible		
Site Matrix Description	Lead gloves, plastics from Bldg. 38, glass, lead gloves, 4 - 1 litre bottles, 3 - poly bottles from R Bldg.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT | **TRUCON CODE**

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	X
Unknown		Unknown		Decon and Decommissioning	X	N/A	
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000631

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE MD

MD-T013 CONTAINER: Drum | Type/Size: Type 001

Container Mat'l: steel | Int. Vol/Ctnr: 0.208 m3

Liner Type: n/a | Liner Material:

Number Stored: 2 | Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	336.1	313.9	358.2
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.4	m3
End of 1993:	0.4	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.63E+00	Curies/m3
Pu239	3.70E+00	Curies/m3

000633

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MD

WASTE STREAM MWIR ID	MD-W002	**STREAM NAME**	Absorbed Aqueous Liquids
WIPP ID	MD-W002		
Local ID	MD-833	**DESCRIPTION**	Corrosives - TRU
MATRIX CODE	3150		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Solidified Inorganics		
Site Matrix Description	*TRU waste from PP-113, R-140, R-149*		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		*Suspect Mixed TRU*		Residues	X		*Other*	X
Unknown		Unknown		Decon and Decommissioning			N/A	
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

0000633

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MD | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE MD

MD-W002

CONTAINER:	Drum	Container Matl:	steel	Liner Type:	n/a
Type/Size:		Int. Vol/Ctnr:	0.208 m3	Liner Material:	

Number Stored: 12
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	2.5	2.5	m3
End of 1993:	2.5	2.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.63E+00	Curies/m3

Comments

Typical activity is less than 1.63E+00

University of Missouri

UNIVERSITY OF MISSOURI (MU)
WASTE STREAM PROFILES

The following assumptions/modifications were made by the WTWBIR team in developing the MU waste stream profiles:

- MU Final Waste Form Groups were modified to be consistent with the nomenclature used in the WTWBID. These changes included word and spelling changes. The assigned Final Waste Form Groups are consistent with the information provided by MU.
- Since only current volumes were provided by MU, the final form volumes were assumed to be the same as the current volumes.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MU | **WASTE TYPE** MTRU | **HANDLING** CH | **GENERATOR SITE** MU

WASTE STREAM MWIR ID	MU-W002	**STREAM NAME**	Heterogeneous Debris
WIPP ID	MU-W002		
Local ID		**DESCRIPTION**	Mixed TRU Waste
MATRIX CODE	5400		
SITE FINAL FORM IDC			

Waste Matrix Code Group Heterogeneous

Site Matrix Description MTRU Heterogeneous Debris. The radioactive wastes generated on the project will come first from normal operations and second from the D&D of the facility at the end of the project. Radioactive wastes from normal operation will consist of the following: 1) HEPA filters from the glovebox, 2) HEPA filters from offgas and room filtration systems, 3) paper wipes from periodic cleaning of the gloveboxes, and 4) used sample bottles.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU	X	Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown	X	Unknown		Decon and Decommissioning	X		N/A	
				Environmental Restoration			Unknown	X
				From Treatment of Waste				
				Maintenance				

000637

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME MU

WASTE TYPE MTRU HANDLING CH GENERATOR SITE MU

MU-W002 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: bag
Liner Material: 4 ml plastic

Number Stored: 0
Number Projected: 8

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	11.3	0.0	20.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	25.0	0.0	60.0
Cellulosics	2.5	0.0	10.0
Rubber	25.0	0.0	50.0
Plastics	37.5	0.0	80.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.000	0.000	m3
End of 1993:	0.060	0.060	m3
1994:	0.080	0.080	m3/yr
1995:	0.080	0.080	m3/yr
1996:	0.080	0.080	m3/yr
1997:	1.364	1.364	m3/ry
1998-2002:	0.000	0.000	m3/yr
2003-2022:	0.000	0.000	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A

D011A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	8.00E-01	Curies/m3
Np237	3.00E-03	Curies/m3
Pu239	3.40E-01	Curies/m3
U238	1.60E-09	Curies/m3

Nevada Test Site

NEVADA TEST SITE (NT)
WASTE STREAM PROFILES

The following assumptions/modifications were made by the WTWBIR team in developing the NT waste stream profiles:

- NT Final Waste Form Groups were modified to be consistent with the nomenclature used in the WTWBID. These changes included word and spelling changes. The assigned Final Waste Form Groups are consistent with the information provided by NT.
- The material parameters for NT waste streams were added by the WTWBIR team based on volume weighted averages of appropriate waste streams from LL. All of the NT TRU waste is assumed to be waste from LL.
- Final form volumes were not provided by NT for individual years. Based on agreements with the site, the same value for the total projected volume was reported as the final form volume for the years 2003 to 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME NT

WASTE TYPE MTRU HANDLING CH GENERATOR SITE LL

NT-W001 CONTAINER: SWB
Type/Size:
Container Matl:
Int. Vol/Ctnr: 1.9 m3
Liner Type:
Liner Material:
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	151.3	13.8	554.0
Aluminum-Based Metals/Alloys	21.4	0.0	512.0
Other Metals	10.8	0.0	483.0
Other Inorganic Materials	6.8	0.0	475.0
Cellulosics	11.3	0.0	313.0
Rubber	3.1	0.0	62.9
Plastics	4.7	1.9	128.0
Solidified, Inorganic matrix	1.7	0.0	177.0
Solidified, Organic matrix	1.7	0.0	177.0
Soils	0.0	0.0	0.1
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	272.0	275.5	m3
End of 1993:	272.0	275.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

CA181
CA352
D001A
D001C
D002B
D003D
D006A
D007A
D008C
D011A
F001
F002
F003
P015

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
AM241	4.90E-01	Curies/m3
AM243	1.99E-03	Curies/m3
CF249	1.89E-05	Curies/m3
CF250	5.28E-04	Curies/m3
CF252	8.94E-03	Curies/m3
C14	4.08E-07	Curies/m3
CS137	6.54E-05	Curies/m3
CM243	1.10E-06	Curies/m3
CM244	6.79E-01	Curies/m3
CM248	1.05E-11	Curies/m3
EU152	3.32E-03	Curies/m3
EU154	1.98E-03	Curies/m3
H3	2.04E-04	Curies/m3
KR85	6.53E-04	Curies/m3
MFP	3.41E-02	Curies/m3
NP237	7.82E-06	Curies/m3
PU238	2.41E-01	Curies/m3
PU239	4.54E+00	Curies/m3
PU240	3.05E-02	Curies/m3
PU241	5.60E-01	Curies/m3
PU242	1.42E-04	Curies/m3
PU244	1.63E-09	Curies/m3
PU231	8.16E-07	Curies/m3
RA226	4.09E-04	Curies/m3
SR90	2.24E-07	Curies/m3
TH228	4.03E-06	Curies/m3
U232	2.95E-05	Curies/m3
U233	2.94E-03	Curies/m3
U234	8.16E-06	Curies/m3
U235	1.71E-07	Curies/m3
U238	5.45E-08	Curies/m3

Comments

- This waste stream/container combination contains material regulated under California Hazardous Waste codes CA352 and CA181.
- Most of this waste was packaged before RCRA characterization requirements were imposed; the generator is not confident about waste content
- Isotope content, activity, quantity, and EPA codes were established based on info provided by LLNL.

Assumptions:
- Contents of 1636 55-gal. drums and one 85 - gal drum will fit inside 1,637 0.208 m3 drums.

- Two boxes contain 12 drums, whose contents will be transferred to 12 0.208 m3 drums.

- Empty 55-gal. overpacks are decontaminated and/or disposed as LLW, generating 3 drums (0.208 m3/drum) of decon redisue, i.e., rags, kimwipes, clothing, carbon filter vents, and gaskets.

- Empty 55-gal. drums are decontaminated and/or disposed as LLW, generating 2 drums (0.208 m3 drum) and 1 SWB of decon residue.

- 58 steel, oversized boxes: 1) Contents are size-reduced to fit inside 143 SWBs;

NT-W001 - 2

2/28/95

000642

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME NT

WASTE TYPE MTRU HANDLING CH GENERATOR SITE LL

WASTE STREAM MWIR ID	NT-W001	STREAM NAME	Heterogeneous Debris, Uncategorized
WIPP ID	NT-W001		
Local ID	LL-002	DESCRIPTION	NTS STORED, TRU WASTE FROM LLNL
MATRIX CODE	5490		
SITE FINAL FORM IDC			

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: This waste stream consists of glovebox parts, laboratory trash, contaminated equipment, and solidified sludges. Real time radiography has been performed on the waste to verify there are no free liquids present, with the exception of liquid in aerosol cans. Most of the waste is contact handled TRU waste; one and 3 drums are remote handled. The waste stream was generated at Lawrence Livermore National Laboratory, Livermore, CA (LLNL) and shipped to the NTS from 1974 until 1990. The waste was declared as potentially mixed TRU waste by the generator in April, 1991.

NO MIGRATION VARIANCE PETITION ASSIGNMENT: NT 111; 116; 211;225

TRUCON CODE: NT 111; 116; 211;225

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste	X		
				Maintenance	X		

1470003

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME NT | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE LL

2) Empty boxes deconned to LLW concentrations, with 1 SWB of decon residue generated.

- Of total volume, 612 m3, and curies for isotopes with > 1 yr T 1/2's, 4,039 curies:
  - Drums comprise 55.6% of volume, with 2,245.684 Ci.
  - Boxes comprise 44.4% of volume, with 1,793.316 Ci
  - *Packages (drums & boxes) average 6.593 Ci/m3.*

- PU-239 total grams, 6,300.5:
  - Packages (drums & boxes) average 10.28 g/m3.

D38(Du) 1.97E-07 Curies/m3

000643

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME NT | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE LL

NT-W001 CONTAINER: Drum | Type/Size: 55 gallon | Container Matl: Steel | Int. Vol/Ctnr: 0.208 m3 | Liner Type: Rigid | Liner Material: HDPE 90 mil. | Number Stored: 1637 | Number Projected: 17

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	9.9	0.0	319.0
Aluminum-Based Metals/Alloys	5.2	0.0	310.0
Other Metals	1.9	0.0	305.0
Other Inorganic Materials	3.3	0.7	171.0
Cellulosics	84.9	0.0	318.0
Rubber	4.4	0.0	168.0
Plastics	85.9	5.1	318.0
Solidified, Inorganic matrix	19.7	7.8	139.0
Solidified, Organic matrix	19.7	7.8	139.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	340.6	344.0	m3
End of 1993:	340.6	344.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

CA181
CA352
D001A
D001C
D002B
D003D
D006A
D007A
D008C
D011A
F001
F002
F003
P015

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
AM241	4.70E-01	Curies/m3
AM243	1.99E-03	Curies/m3
CF249	1.89E-05	Curies/m3
CF250	5.29E-04	Curies/m3
CF252	8.95E-03	Curies/m3
C14	4.08E-07	Curies/m3
CS137	6.55E-05	Curies/m3
Cm243	1.10E-06	Curies/m3
CM244	6.79E-01	Curies/m3
CM248	1.05E-11	Curies/m3
EU152	3.32E-03	Curies/m3
EU154	1.99E-03	Curies/m3
H3	2.04E-04	Curies/m3
KR85	6.53E-04	Curies/m3
MFP	3.41E-02	Curies/m3
NP237	7.82E-06	Curies/m3
PU238	2.41E-01	Curies/m3
PU239	4.54E+00	Curies/m3
PU240	3.05E-02	Curies/m3
PU241	5.60E-01	Curies/m3
PU242	1.42E-04	Curies/m3
PU244	1.63E-09	Curies/m3
PA231	8.16E-07	Curies/m3
RA226	4.09E-04	Curies/m3
SR90	2.24E-07	Curies/m3
TH228	4.03E-06	Curies/m3
U232	2.95E-05	Curies/m3
U233	2.94E-03	Curies/m3
U234	8.16E-06	Curies/m3
U235	1.71E-07	Curies/m3
U238	5.45E-08	Curies/m3

Comments

- This waste stream/container combination contains material regulated under California Hazardous Waste codes CA352 and CA181.
- Most of this waste was packaged before RCRA characterization requirements were imposed; the generator is not confident about waste content
- Isotope content, activity, quantity, and EPA codes were established based on info provided by LLNL.

Assumptions:
- Contents of 1636 55-gal. drums and one 85 - gal drum will fit inside 1,637 0.208 m3 drums.

- Two boxes contain 12 drums, whose contents will be transferred to 12 0.208 m3 drums.

- Empty 55-gal. overpacks are decontaminated and/or disposed as LLW, generating 3 drums (0.208 m3/drum) of decon redisue, i.e., rags, kimwipes, clothing, carbon filter vents, and gaskets.

- Empty 55-gal. drums are decontaminated and/or disposed as LLW, generating 2 drums (0.208 m3 drum) and 1 SWB of decon residue.

- 58 steel, oversized boxes: 1) Contents are size-reduced to fit inside 143 SWBs;

SITE NAME NT WASTE TYPE MTRU HANDLING CH GENERATOR SITE LL

2) Empty boxes deconned to LLW concentrations, with 1 SWB of decon residue generated. - Of total volume, 612 m3, and curies for isotopes with > 1 yr T 1/2's, 4,039 curies: - Drums comprise 55.6% of volume, with 2,245.684 Ci. - Boxes comprise 44.4% of volume, with 1,793.316 Ci - Packages (drums & boxes) average 6.593 Ci/m3. - PU-239 total grams, 6,300.5: - Packages (drums & boxes) average 10.28 g/m3.	D38 (du)	1.97E-07	Curies/m3
			Curies/m3

000645

Oak Ridge Reservation

OAK RIDGE NATIONAL LABORATORY (OR)
WASTE STREAM PROFILES

The following assumptions/modifications were made by the WTWBIR team in developing the OR waste stream profiles:

- OR Final Waste Form Groups were modified to be consistent with the nomenclature used in the WTWBID. These changes included word and spelling changes. The assigned Final Waste Form Groups are consistent with the information provided by OR.
- Since only current volumes were provided by OR, the final form volumes were assumed to be the same as the current volumes.
- Based on agreements with OR, the volumes per year for 1998-2002 and 2003-2022 were corrected to reflect the appropriate number of years.
- OR reported all containers for each waste stream on one form. In order to maintain consistency with the other sites, forms for each type of container were developed by the WTWBIR team. All of the information on the container form remained the same as reported by OR, except that the volume information for each container was recalculated. These calculations were based on the total number of each container, the volume of each container, and the total volumes reported by OR. The volumes for three casks were listed as unknown. The volumes were assumed to be an average of the other casks submitted by OR.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR

WASTE TYPE MTRU **HANDLING** RH **GENERATOR SITE** OR

WASTE STREAM	MWIR ID	OR-W040
	WIPP ID	OR-W040
	Local ID	2039
MATRIX CODE		5400
SITE FINAL FORM IDC		2039

STREAM NAME RH TRU Heterogeneous Debris

DESCRIPTION 5490 Uncategorized Heterogeneous Debris

Waste Matrix Code Group Heterogeneous

Site Matrix Description This waste stream consists of RH TRU waste which is classified as contaminated equipment, decontamination debris or dry solids. The physical form is solid. This waste is categorized as heterogeneous debris (matrix code 5400).

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	*Mixed TRU*	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	
				Environmental Restoration		Unknown	X
				From Treatment of Waste			
				Maintenance			

000643

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR

WASTE TYPE MTRU HANDLING RH GENERATOR SITE OR

OR-W040 CONTAINER: Cask
Type/Size:

Container Matl:
Int. Vol/Ctnr: m3

Liner Type:
Liner Material:

Number Stored: 3
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1716.4
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.0	0.0	21.3
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.4	0.0	17.9
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	5.0	5.0	m3
End of 1993:	5.0	5.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A

D008A

D009A

D011A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Ac227	1.00E-03	Curies/m3
Am241	3.89E+00	Curies/m3
Am243	9.99E-05	Curies/m3
Bk249	9.99E-05	Curies/m3
Cf249	3.38E-03	Curies/m3
Cf252	2.52E-01	Curies/m3
Cm244	1.70E+00	Curies/m3
Co60	3.50E+00	Curies/m3
Cs137	3.70E+02	Curies/m3
Pu238	1.19E+01	Curies/m3
Pu239	4.47E+00	Curies/m3
Pu241	4.32E+00	Curies/m3
Ra223	1.00E-03	Curies/m3
Sr90	4.26E+02	Curies/m3
Th232	5.00E-04	Curies/m3
U233	3.95E-01	Curies/m3
U235	1.00E-04	Curies/m3
U238	9.17E-05	Curies/m3

Comments

External volume of these casks are unknown.

5490 Uncategorized Heterogeneous Debris information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPjP for TRU waste characterization in which utilization of process knowledge data will be used to produce more detailed information on material parameters per waste stream. Data submitted was taken from the BIR database.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR

WASTE TYPE MTRU HANDLING RH GENERATOR SITE OR

OR-W040 CONTAINER: Drum Type/Size: 55-gallon

Container Matl: BI Int. Vol/Ctnr: 0.21 m3

Liner Type: Liner Material:

Number Stored: 1 Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1716.4
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.0	0.0	21.3
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.4	0.0	17.9
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	141.8		
Packaging Material, Plastic	39.4		

Comments

5490 Uncategorized Heterogeneous Debris information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPjP for TRU waste characterization in which utilization of process knowledge data will be used to produce more detailed information on material parameters per waste stream. Data submitted was taken from the BIR database.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.2	m3
End of 1993:	0.2	0.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A

D008A

D009A

D011A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Ac227	1.00E-03	Curies/m3
Am241	3.89E+00	Curies/m3
Am243	9.99E-05	Curies/m3
Bk249	9.99E-05	Curies/m3
Cf249	3.38E-03	Curies/m3
Cf252	2.52E-01	Curies/m3
Cm244	1.70E+00	Curies/m3
Co60	3.50E+00	Curies/m3
Cs137	3.70E+02	Curies/m3
Pu238	1.19E+01	Curies/m3
Pu239	4.47E+00	Curies/m3
Pu241	4.32E+00	Curies/m3
Ra223	1.00E-03	Curies/m3
Sr90	4.26E+02	Curies/m3
Th232	5.00E-04	Curies/m3
U233	3.95E-01	Curies/m3
U235	1.00E-04	Curies/m3
U238	9.17E-05	Curies/m3

000650

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR | WASTE TYPE MTRU | HANDLING RH | GENERATOR SITE OR

OR-W040 CONTAINER: Cask
Type/Size:

Container Matl: concrete
Int. Vol/Ctnr: 1.66 m3

Liner Type:
Liner Material:

Number Stored: 39
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1716.4
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.0	0.0	21.3
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.4	0.0	17.9
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

Comments

5490 Uncategorized Heterogeneous Debris Information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPjP for TRU waste characterization in which utilization of process knowledge data will be used to produce more detailed information on material parameters per waste stream. Data submitted was taken from the BIR database.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	64.7	64.7	m3
End of 1993:	64.7	64.7	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A
D008A
D009A
D011A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Ac227	1.00E-03	Curies/m3
Am241	3.89E+00	Curies/m3
Am243	9.99E-05	Curies/m3
Bk249	9.99E-05	Curies/m3
Cf249	3.38E-03	Curies/m3
Cf252	2.52E-01	Curies/m3
Cm244	1.70E+00	Curies/m3
Co60	3.50E+00	Curies/m3
Cs137	3.70E+02	Curies/m3
Pu238	1.19E+01	Curies/m3
Pu239	4.47E+00	Curies/m3
Pu241	4.32E+00	Curies/m3
Ra223	1.00E-03	Curies/m3
Sr90	4.26E+02	Curies/m3
Th232	5.00E-04	Curies/m3
U233	3.95E-01	Curies/m3
U235	1.00E-04	Curies/m3
U238	9.17E-05	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR | WASTE TYPE MTRU | HANDLING RH | GENERATOR SITE OR

OR-W040 CONTAINER: Cask | Type/Size: | Container Mat'l: concrete | Int. Vol/Ctnr: 1.9 m3 | Liner Type: | Liner Material: | Number Stored: 156 | Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1716.4
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.0	0.0	21.3
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.4	0.0	17.9
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

Comments

5490 Uncategorized Heterogeneous Debris information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPjP for TRU waste characterization in which utilization of process knowledge data will be used to produce more detailed information on material parameters per waste stream. Data submitted was taken from the BIR database.

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	296.4	296.4	m3
End of 1993:	296.4	296.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A
D008A
D009A
D011A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Ac227	1.00E-03	Curies/m3
Am241	3.89E+00	Curies/m3
Am243	9.99E-05	Curies/m3
Bk249	9.99E-05	Curies/m3
Cf249	3.38E-03	Curies/m3
Cf252	2.52E-01	Curies/m3
Cm244	1.70E+00	Curies/m3
Co60	3.50E+00	Curies/m3
Cs137	3.70E+02	Curies/m3
Pu238	1.19E+01	Curies/m3
Pu239	4.47E+00	Curies/m3
Pu241	4.32E+00	Curies/m3
Ra223	1.00E-03	Curies/m3
Sr90	4.26E+02	Curies/m3
Th232	5.00E-04	Curies/m3
U233	3.95E-01	Curies/m3
U235	1.00E-04	Curies/m3
U238	9.17E-05	Curies/m3

000653

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR

WASTE TYPE MTRU HANDLING RH GENERATOR SITE OR

OR-W040 CONTAINER: Drum
Type/Size: 30-gallon

Container Matl: stainless steel
Int. Vol/Ctnr: 0.11 m3

Liner Type:
Liner Material:

Number Stored: 87
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1716.4
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.0	0.0	21.3
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.4	0.0	17.9
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	141.8		
Packaging Material, Plastic	39.4		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	9.6	9.6	m3
End of 1993:	9.6	9.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A
D008A
D009A
D011A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Ac227	1.00E-03	Curies/m3
Am241	3.89E+00	Curies/m3
Am243	9.99E-05	Curies/m3
Bk249	9.99E-05	Curies/m3
Cf249	3.38E-03	Curies/m3
Cf252	2.52E-01	Curies/m3
Cm244	1.70E+00	Curies/m3
Co60	3.50E+00	Curies/m3
Cs137	3.70E+02	Curies/m3
Pu238	1.19E+01	Curies/m3
Pu239	4.47E+00	Curies/m3
Pu241	4.32E+00	Curies/m3
Ra223	1.00E-03	Curies/m3
Sr90	4.26E+02	Curies/m3
Th232	5.00E-04	Curies/m3
U233	3.95E-01	Curies/m3
U235	1.00E-04	Curies/m3
U238	9.17E-05	Curies/m3

Comments

5490 Uncategorized Heterogeneous Debris information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPjP for TRU waste characterization in which utilization of process knowledge data will be used to produce more detailed information on material parameters per waste stream. Data submitted was taken from the BIR database.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR

WASTE TYPE MTRU HANDLING RH GENERATOR SITE OR

OR-W040

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: stainless steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 36
Number Projected: 624

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1716.4
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.0	0.0	21.3
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.6
Rubber	7.4	0.0	17.9
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	141.8		
Packaging Material, Plastic	39.4		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.6	0.6	m3
End of 1993:	6.9	6.9	m3
1994:	6.3	6.3	m3/yr
1995:	6.3	6.3	m3/yr
1996:	6.3	6.3	m3/yr
1997:	6.3	6.3	m3/ry
1998-2002:	6.3	6.3	m3/yr
2003-2022:	6.3	6.3	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A

D008A

D009A

D011A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Ac227	1.00E-03	Curies/m3
Am241	3.89E+00	Curies/m3
Am243	9.99E-05	Curies/m3
Bk249	9.99E-05	Curies/m3
Cf249	3.38E-03	Curies/m3
Cf252	2.52E-01	Curies/m3
Cm244	1.70E+00	Curies/m3
Co60	3.50E+00	Curies/m3
Cs137	3.70E+02	Curies/m3
Pu238	1.19E+01	Curies/m3
Pu239	4.47E+00	Curies/m3
Pu241	4.32E+00	Curies/m3
Ra223	1.00E-03	Curies/m3
Sr90	4.26E+02	Curies/m3
Th23	5.00E-04	Curies/m3
U233	3.95E-01	Curies/m3
U235	1.00E-04	Curies/m3
U238	9.17E-05	Curies/m3

Comments

5490 Uncategorized Heterogeneous Debris Information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPjP for TRU waste characterization in which utilization of process knowledge data will be used to produce more detailed information on material parameters per waste stream. Data submitted was taken from the BIR database.

000654

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE OR

WASTE STREAM MWIR ID	OR-W042
WIPP ID	OR-W042
Local ID	2041
MATRIX CODE	3120
SITE FINAL FORM IDC	2041
STREAM NAME	Inactive Storage Tank Contents - MTRU Sludge
DESCRIPTION	3129 Uncategorized Inorganic Sludges
Waste Matrix Code Group	Solidified Inorganics
Site Matrix Description	The waste stream is comprised of MTRU sludge which has settled and separated from wastewater that has been stored in large underground storage tanks. The waste is a product of past operations at ORNL involving various nuclear research and radioisotope fabrication processes and is currently undergoing RI/FS as part of a CERCLA program involving these tanks and contents. This waste is under the responsibility of DOE EM-40 and as such are not technically a RCRA mixed waste. However, since the waste has been reported in the ORR LDR FFCA, it is included in the MWIR.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	
				Environmental Restoration		Unknown	X
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE OR

OR-W042

CONTAINER: Single shell tank
Type/Size:
Container Matl: variable
Int. Vol/Ctnr: m3
Liner Type:
Liner Material:
Number Stored: 11
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	793.3	346.2	1057.7
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	110.0	110.0	m3
End of 1993:	110.0	110.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

TYPICAL EPA CODES APPLICABLE

D006A
D007A
D008A
D009A

Comments

External volume of the single shell tank is variable.

Isotopic composition is unknown for this waste stream.

3129 Uncategorized Inorganic Sludge information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPjP for TRU waste characterization in which utilization of process knowledge data will be used to produce more detailed information on material parameters per waste stream. Data submitted was taken from the BIR database.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** OR

WASTE STREAM	MWIR ID	OR-W044
	WIPP ID	OR-W044
	Local ID	2043
MATRIX CODE		5400
SITE FINAL FORM IDC		2043

STREAM NAME CH TRU Heterogeneous Debris

DESCRIPTION 5490 Uncategorized Heterogeneous Debris

Waste Matrix Code Group Heterogeneous

Site Matrix Description This waste stream consists of CH TRU waste which is classified as contaminated equipment, decontamination debris or dry solids. The physical form is solid. These wastes have been examined by WEAF and do not contain free or containerized liquids. This waste is categorized as heterogeneous debris (matrix code 5400).

NO MIGRATION VARIANCE PETITION ASSIGNMENT OR 125A; 125B

TRUCON CODE OR 125A; 125B

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	
				Environmental Restoration		Unknown	X
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE OR

OR-W044

CONTAINER: Box
Type/Size:

Container Matl: metal
Int. Vol/Ctnr: 2.37 m3

Liner Type:
Liner Material:

Number Stored: 50
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1716.4
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.0	0.0	21.3
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.4	0.0	17.9
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	118.5	118.5	m3
End of 1993:	118.5	118.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A
D008A
D009A
D011A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.61E+00	Curies/m3
Am243	9.81E-02	Curies/m3
Bk249	2.28E+01	Curies/m3
Cfr249	5.03E-03	Curies/m3
Cf252	1.38E-02	Curies/m3
Cm244	3.47E+00	Curies/m3
Cm248	5.07E-03	Curies/m3
Co60	1.83E-06	Curies/m3
Cs137	2.01E-02	Curies/m3
Es254	0.00E+00	Curies/m3
Fe59	4.00E+00	Curies/m3
Gd153	0.00E+00	Curies/m3
Np237	3.96E-02	Curies/m3
Pm147	7.73E-01	Curies/m3
Pu238	6.82E+01	Curies/m3
Pu239	6.23E-01	Curies/m3
Pu240	1.34E+01	Curies/m3
Pu241	2.02E+03	Curies/m3
Pu242	4.89E-03	Curies/m3
Ra226	9.27E-01	Curies/m3
Sr90	1.60E-02	Curies/m3
Tc99	6.84E-01	Curies/m3
Th232	5.40E-05	Curies/m3
U232	2.04E-02	Curies/m3
U233	1.69E-01	Curies/m3
U234	1.28E-04	Curies/m3
U235	5.90E-05	Curies/m3
U236	4.35E-05	Curies/m3
U238	5.35E-04	Curies/m3
Y90	3.40E-06	Curies/m3

Comments

5490 Uncategorized Heterogeneous Debris information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPjP for TRU waste characterization in which utilization of process knowledge data will be used to produce more detailed information on material parameters per waste stream. Data submitted was taken from the BIR database.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE OR

OR-W044

CONTAINER:	Box	Container Mat'l:	wood	Liner Type:	
Type/Size:		Int. Vol/Ctnr:	11.8 m3	Liner Material:	

Number Stored: 6
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1716.4
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.0	0.0	21.3
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.4	0.0	17.9
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

Comments

5490 Uncategorized Heterogeneous Debris information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPjP for TRU waste characterization in which utilization of process knowledge data will be used to produce more detailed information on material parameters per waste stream. Data submitted was taken from the BIR database.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	70.8	70.8	m3
End of 1993:	70.8	70.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A
D008A
D009A
D011A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.61E+00	Curies/m3
Am243	9.81E-02	Curies/m3
Bk249	2.28E+01	Curies/m3
Cf249	5.03E-03	Curies/m3
Cf252	1.38E-02	Curies/m3
Cm244	3.47E+00	Curies/m3
Cm248	5.07E-03	Curies/m3
Co60	1.83E-06	Curies/m3
Cs137	2.01E-02	Curies/m3
Es254	0.00E+00	Curies/m3
Fe59	4.00E+00	Curies/m3
Gd153	0.00E+00	Curies/m3
Np237	3.96E-02	Curies/m3
Pm147	7.73E-01	Curies/m3
Pu238	6.82E+01	Curies/m3
Pu239	6.23E-01	Curies/m3
Pu240	1.34E+01	Curies/m3
Pu241	2.02E+03	Curies/m3
Pu242	4.89E-03	Curies/m3
Ra226	9.27E-01	Curies/m3
Sr90	1.60E-02	Curies/m3
Tc99	6.84E-01	Curies/m3
Th232	5.40E-05	Curies/m3
U232	2.04E-02	Curies/m3
U233	1.69E-01	Curies/m3
U234	1.28E-04	Curies/m3
U235	5.90E-05	Curies/m3
U236	4.35E-05	Curies/m3
U238	5.35E-04	Curies/m3
Y90	3.40E-06	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR

WASTE TYPE MTRU HANDLING CH GENERATOR SITE OR

OR-W044

CONTAINER: Drum
Type/Size: 30-gallon

Container Matl: BI
Int. Vol/Ctnr: 0.11 m3

Liner Type:
Liner Material:

Number Stored: 10
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1716.4
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.0	0.0	21.3
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.4	0.0	17.9
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

Comments

5490 Uncategorized Heterogeneous Debris information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPjP for TRU waste characterization in which utilization of process knowledge data will be used to produce more detailed information on material parameters per waste stream. Data submitted was taken from the BIR database.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.1	1.1	m3
End of 1993:	1.1	1.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A
D008A
D009A
D011A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.61E+00	Curies/m3
Am243	9.81E-02	Curies/m3
Bk249	2.28E+01	Curies/m3
Cf249	5.03E-03	Curies/m3
Cf252	1.38E-02	Curies/m3
Cm244	3.47E+00	Curies/m3
Cm248	5.07E-03	Curies/m3
Co60	1.83E-06	Curies/m3
Cs137	2.01E-02	Curies/m3
Es254	0.00E+00	Curies/m3
Fe59	4.00E+00	Curies/m3
Gd153	0.00E+00	Curies/m3
Np237	3.96E-02	Curies/m3
Pm147	7.73E-01	Curies/m3
Pu238	6.82E+01	Curies/m3
Pu239	6.23E-01	Curies/m3
Pu240	1.34E+01	Curies/m3
Pu241	2.02E+03	Curies/m3
Pu242	4.89E-03	Curies/m3
Ra226	9.27E-01	Curies/m3
Sr90	1.60E-02	Curies/m3
Tc99	6.84E-01	Curies/m3
Th232	5.40E-05	Curies/m3
U232	2.04E-02	Curies/m3
U233	1.69E-01	Curies/m3
U234	1.28E-04	Curies/m3
U235	5.90E-05	Curies/m3
U236	4.35E-05	Curies/m3
U238	5.35E-04	Curies/m3
Y90	3.40E-06	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE OR

OR-W044 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: BI
Int. Vol/Ctnr: 0.21 m3

Liner Type:
Liner Material:

Number Stored: 164
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1716.4
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.0	0.0	21.3
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.4	0.0	17.9
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	141.8		
Packaging Material, Plastic	39.4		

Comments

5490 Uncategorized Heterogeneous Debris information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPjP for TRU waste characterization in which utilization of process knowledge data will be used to produce more detailed information on material parameters per waste stream. Data submitted was taken from the BIR database.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	34.4	34.4	m3
End of 1993:	34.4	34.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A
D008A
D009A
D011A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.61E+00	Curies/m3
Am243	9.81E-02	Curies/m3
Bk249	2.28E+01	Curies/m3
Cf249	5.03E-03	Curies/m3
Cf252	1.38E-02	Curies/m3
Cm244	3.47E+00	Curies/m3
Cm248	5.07E-03	Curies/m3
Co60	1.83E-06	Curies/m3
Cs137	2.01E-02	Curies/m3
Es254	0.00E+00	Curies/m3
Fe59	4.00E+00	Curies/m3
Gd153	0.00E+00	Curies/m3
Np237	3.96E-02	Curies/m3
Pm147	7.73E-01	Curies/m3
Pu238	6.82E+01	Curies/m3
Pu239	6.23E-01	Curies/m3
Pu240	1.34E+01	Curies/m3
Pu241	2.02E+03	Curies/m3
Pu242	4.89E-03	Curies/m3
Ra226	9.27E-01	Curies/m3
Sr90	1.60E-02	Curies/m3
Tc99	6.84E-01	Curies/m3
Th232	5.40E-05	Curies/m3
U232	2.04E-02	Curies/m3
U233	1.69E-01	Curies/m3
U234	1.28E-04	Curies/m3
U235	5.90E-05	Curies/m3
U236	4.35E-05	Curies/m3
U238	5.35E-04	Curies/m3
Y90	3.40E-06	Curies/m3

1990000

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR

WASTE TYPE MTRU HANDLING CH GENERATOR SITE OR

OR-W044 CONTAINER: Drum
Type/Size: 30-gallon

Container Matl: stainless steel
Int. Vol/Ctnr: 0.11 m3

Liner Type:
Liner Material:

Number Stored: 70
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1716.4
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.0	0.0	21.3
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.4	0.0	17.9
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

Comments

5490 Uncategorized Heterogeneous Debris information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPjP for TRU waste characterization in which utilization of process knowledge data will be used to produce more detailed information on material parameters per waste stream. Data submitted was taken from the BIR database.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	7.7	7.7	m3
End of 1993:	7.7	7.7	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A
D008A
D009A
D011A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.61E+00	Curies/m3
Am243	9.81E-02	Curies/m3
Bk249	2.28E+01	Curies/m3
Cf249	5.03E-03	Curies/m3
Cf252	1.38E-02	Curies/m3
Cm244	3.47E+00	Curies/m3
Cm248	5.07E-03	Curies/m3
Co60	1.83E-06	Curies/m3
Cs137	2.01E-02	Curies/m3
Es254	0.00E+00	Curies/m3
Fe59	4.00E+00	Curies/m3
Gd153	0.00E+00	Curies/m3
Np237	3.96E-02	Curies/m3
Pm147	7.73E-01	Curies/m3
Pu238	6.82E+01	Curies/m3
Pu239	6.23E-01	Curies/m3
Pu240	1.34E+01	Curies/m3
Pu241	2.02E+03	Curies/m3
Pu242	4.89E-03	Curies/m3
Ra226	9.27E-01	Curies/m3
Sr90	1.60E-02	Curies/m3
Tc99	6.84E-01	Curies/m3
Th232	5.40E-05	Curies/m3
U232	2.04E-02	Curies/m3
U233	1.69E-01	Curies/m3
U234	1.28E-04	Curies/m3
U235	5.90E-05	Curies/m3
U236	4.35E-05	Curies/m3
U238	5.35E-04	Curies/m3
Y90	3.40E-06	Curies/m3

000662

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE OR

OR-W044 CONTAINER: Drum | Type/Size: 55-gallon | Container Matl: stainless steel | Int. Vol/Ctnr: 0.208 m3 | Liner Type: | Liner Material: | Number Stored: 1370 | Number Projected: 1268

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1716.4
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.0	0.0	21.3
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.4	0.0	17.9
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	141.8		
Packaging Material, Plastic	0.0		

Comments

5490 Uncategorized Heterogeneous Debris information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPjP for TRU waste characterization in which utilization of process knowledge data will be used to produce more detailed information on material parameters per waste stream. Data submitted was taken from the BIR database.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	275.8	275.8	m3
End of 1993:	284.9	284.9	m3
1994:	9.1	9.1	m3/yr
1995:	9.1	9.1	m3/yr
1996:	9.1	9.1	m3/yr
1997:	9.1	9.1	m3/ry
1998-2002:	9.1	9.1	m3/yr
2003-2022:	9.1	9.1	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A

D008A

D009A

D011A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.61E+00	Curies/m3
Am243	9.81E-02	Curies/m3
Bk249	2.28E+01	Curies/m3
Cf249	5.03E-03	Curies/m3
Cf252	1.38E-02	Curies/m3
Cm244	3.47E+00	Curies/m3
Cm248	5.07E-03	Curies/m3
Co60	1.83E-06	Curies/m3
Cs137	2.01E-02	Curies/m3
Es254	0.00E+00	Curies/m3
Fe59	4.00E+00	Curies/m3
Gd153	0.00E+00	Curies/m3
Np237	3.96E-02	Curies/m3
Pm147	7.73E-01	Curies/m3
Pu238	6.82E+01	Curies/m3
Pu239	6.23E-01	Curies/m3
Pu240	1.34E+01	Curies/m3
Pu241	2.02E+03	Curies/m3
Pu242	4.89E-03	Curies/m3
Ra226	9.27E-01	Curies/m3
Sr90	1.60E-02	Curies/m3
Tc99	6.84E-01	Curies/m3
Th232	5.40E-05	Curies/m3
U232	2.04E-02	Curies/m3
U233	1.69E-01	Curies/m3
U234	1.28E-04	Curies/m3
U235	5.90E-05	Curies/m3
U236	4.35E-05	Curies/m3
U238	5.35E-04	Curies/m3
Y90	3.40E-06	Curies/m3

00663

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE OR

WASTE STREAM MWIR ID	OR-W045
WIPP ID	OR-W045
Local ID	2044
MATRIX CODE	8000
SITE FINAL FORM IDC	2044

STREAM NAME CH TRU Uncategorized

DESCRIPTION 5490 Uncategorized Heterogeneous Debris

Waste Matrix Code Group Heterogeneous

Site Matrix Description This waste stream consists of CH TRU waste which is not classified. The physical form is either solid, liquid, mixed (both solid and liquid), or unknown. This waste is categorized as unknown (matrix code 8000).

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	
				Environmental Restoration		Unknown	X
				From Treatment of Waste			
				Maintenance			

000664

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE OR

OR-W045

CONTAINER: Box
Type/Size:

Container Mat'l: metal
Int. Vol/Ctnr: 2.37 m3

Liner Type:
Liner Material:

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1716.4
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.0	0.0	21.3
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.4	0.0	17.9
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	2.4	2.4	m3
End of 1993:	2.4	2.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	6.10E+00	Curies/m3
Pu239	4.26E+00	Curies/m3
Pu240	6.58E+00	Curies/m3
Pu241	1.24E+02	Curies/m3

TYPICAL EPA CODES APPLICABLE

D006A
D008A
D009A
D011A

Comments

5490 Uncategorized Heterogeneous Debris information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPjP for TRU waste characterization in which utilization of process knowledge data will be used to produce more detailed information on material parameters per waste stream. Data submitted was taken from the BIR database.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE OR

OR-W045

CONTAINER:	Drum	Container Matl:	stainless steel	Liner Type:	
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	

Number Stored: 6
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1716.4
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.0	0.0	21.3
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.4	0.0	17.9
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	141.8		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.3	1.3	m3
End of 1993:	1.3	1.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	6.10E+00	Curies/m3
Pu239	4.26E+00	Curies/m3
Pu240	6.58E+00	Curies/m3
Pu241	1.24E+02	Curies/m3

TYPICAL EPA CODES APPLICABLE

D006A
D008A
D009A
D011A

Comments

5490 Uncategorized Heterogeneous Debris information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPJP for TRU waste characterization in which utilization of process knowledge data will be used to produce more detailed information on material parameters per waste stream. Data submitted was taken from the BIR database.

999000

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR

WASTE TYPE MTRU **HANDLING** RH **GENERATOR SITE** OR

WASTE STREAM MWIR ID	OR-W046	**STREAM NAME**	Liquid Low Level Waste Storage Tanks - Sludge
WIPP ID	OR-W046		
Local ID	2045	**DESCRIPTION**	3129 Uncategorized Inorganic Sludges, 3229 Organic Solids
MATRIX CODE	3000		
SITE FINAL FORM IDC	2045		
Waste Matrix Code Group	Solidified Inorganics		

Site Matrix Description: This waste stream is comprised of LLLW waste that has been concentrated by evaporation and subsequently stored in large underground storage tanks. The waste is generated as relative dilute low level waste in various nuclear research and radioisotope fabrication processes. These streams are collected centrally and the volumes reduced in an evaporation facility. After the waste has been stored, it separates into phases. The resulting solids (sludge phase) is fairly homogeneous chemically and radiochemically. Since the sludge is a porduct of solids concentration, it has been classified as a TRU waste.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	
				Environmental Restoration		Unknown	X
				From Treatment of Waste	X		
				Maintenance			

000657

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR

WASTE TYPE MTRU | HANDLING RH | GENERATOR SITE OR

OR-W046

CONTAINER: Tanks
Type/Size: Single Shell Tank

Container Matl: Steel
Int. Vol/Ctnr: 189 m3

Liner Type:
Liner Material:

Number Stored: 12
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	793.3	346.2	1057.7
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	605.0	605.0	m3
End of 1993:	605.0	605.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A
D007A
D008A
D009A

TYPICAL ISOTOPIC COMPOSITION

Nuclide | Activity

Comments

3129 Uncategorized Inorganic Sludges and 3229 Organic Solids information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPjP for TRU waste characterization in which utilization of process knowledge data will be used to produce more detailed information on material parameters per waste stream. Data submitted was taken from the BIR database.

Isotopic composition is unknown for this waste stream.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR | WASTE TYPE MTRU | HANDLING RH | GENERATOR SITE OR

OR-W046

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: stainless steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 29
Number Projected: 836

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	793.3	346.2	1057.7
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	141.8		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	6.0	6.0	m3
1994:	6.0	6.0	m3/yr
1995:	6.0	6.0	m3/yr
1996:	6.0	6.0	m3/yr
1997:	6.0	6.0	m3/ry
1998-2002:	6.0	6.0	m3/yr
2003-2022:	6.0	6.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A
D007A
D008A
D009A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

3129 Uncategorized Inorganic Sludges and 3229 Organic Solids information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPJP for TRU waste characterization in which *utilization of process knowledge data will be used to produce more detailed* information on material parameters per waste stream. Data submitted was taken from the BIR database.

Isotopic composition is unknown for this waste stream.

000663

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE OR

WASTE STREAM

MWIR ID	OR-W047
WIPP ID	OR-W047
Local ID	2046
MATRIX CODE	5400
SITE FINAL FORM IDC	2046

STREAM NAME CH TRU Heterogeneous Debris (with liquids)

DESCRIPTION 5400 Heterogeneous Waste

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: This waste stream consists of CH TRU waste which is classified as contamination equipment, decontaminated debris or dry solids. The physical form is solid. These wastes have been examined by WEAF and found to contain free and/or containerized liquids. This waste is categorized as heterogeneous debris (matrix code 5400).

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	
				Environmental Restoration		Unknown	X
				From Treatment of Waste			
				Maintenance			

000670

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR

WASTE TYPE MTRU HANDLING CH GENERATOR SITE OR

OR-W047 CONTAINER: Drum
Type/Size: 30-gallon

Container Matl: BI
Int. Vol/Ctnr: 0.11 m3

Liner Type:
Liner Material:

Number Stored: 5
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1716.4
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.0	0.0	21.3
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.4	0.0	17.9
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.6	0.6	m3
End of 1993:	0.6	0.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A
D008A
D009A
D011A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	2.33E-01	Curies/m3
Pu240	3.81E-01	Curies/m3
Pu241	3.08E+02	Curies/m3
Pu242	1.43E-02	Curies/m3
Ra226	5.85E-03	Curies/m3
Th230	1.20E-05	Curies/m3
Th232	1.50E-05	Curies/m3
U232	4.71E-04	Curies/m3
U233	1.91E-01	Curies/m3
U235	3.80E-05	Curies/m3
U238	5.00E-07	Curies/m3

Comments

5400 Heterogeneous Debris information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPjP for TRU waste characterization in which utilization of process knowledge data will be used to produce more detailed information on material parameters per waste stream. Data submitted was taken from the BIR database.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE OR

OR-W047 CONTAINER: Drum | Type/Size: 55-gallon | Container Matl: BI | Int. Vol/Ctnr: 0.208 m3 | Liner Type: | Liner Material: | Number Stored: 96 | Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1716.4
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.0	0.0	21.3
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.4	0.0	17.9
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

Comments

5400 Heterogeneous Debris information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPjP for TRU waste characterization in which utilization of process knowledge data will be used to produce more detailed information on material parameters per waste stream. Data submitted was taken from the BIR database.

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	20.0	20.0	m3
End of 1993:	20.0	20.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A

D008A

D009A

D011A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	2.33E-01	Curies/m3
Pu240	3.81E-01	Curies/m3
Pu241	3.08E+02	Curies/m3
Pu242	1.43E-02	Curies/m3
Ra226	5.85E-03	Curies/m3
Th230	1.20E-05	Curies/m3
Th232	1.50E-05	Curies/m3
U232	4.71E-04	Curies/m3
U233	1.91E-01	Curies/m3
U235	3.80E-05	Curies/m3
U238	5.00E-07	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE OR

OR-W047

CONTAINER: Drum
Type/Size: 30-gallon

Container Matl: stainless steel
Int. Vol/Ctnr: 0.11 m3

Liner Type:
Liner Material:

Number Stored: 22
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1716.4
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.0	0.0	21.3
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.4	0.0	17.9
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	2.4	2.4	m3
End of 1993:	2.4	2.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A
D008A
D009A
D011A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	2.33E-01	Curies/m3
Pu240	3.81E-01	Curies/m3
Pu241	3.08E+02	Curies/m3
Pu242	1.43E-02	Curies/m3
Ra226	5.85E-03	Curies/m3
Th230	1.20E-05	Curies/m3
Th232	1.50E-05	Curies/m3
U232	4.71E-04	Curies/m3
U233	1.91E-01	Curies/m3
U235	3.80E-05	Curies/m3
U238	5.00E-07	Curies/m3

Comments

5400 Heterogeneous Debris information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPJP for TRU waste characterization in which utilization of process knowledge data will be used to produce more detailed information on material parameters per waste stream. Data submitted was taken from the BIR database.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME OR

WASTE TYPE MTRU HANDLING CH GENERATOR SITE OR

OR-W047 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: stainless steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 620
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.2	0.0	1716.4
Aluminum-Based Metals/Alloys	0.0	0.0	1.6
Other Metals	0.0	0.0	21.3
Other Inorganic Materials	2.4	0.0	24.0
Cellulosics	80.9	0.0	184.8
Rubber	7.4	0.0	17.9
Plastics	64.9	0.0	149.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	3.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	141.8		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	129.0	129.0	m3
End of 1993:	129.0	129.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A
D008A
D009A
D011A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	2.33E-01	Curies/m3
Pu240	3.81E-01	Curies/m3
Pu241	3.08E+02	Curies/m3
Pu242	1.43E-02	Curies/m3
Ra226	5.85E-03	Curies/m3
Th230	1.20E-05	Curies/m3
Th232	1.50E-05	Curies/m3
U232	4.71E-04	Curies/m3
U233	1.91E-01	Curies/m3
U235	3.80E-05	Curies/m3
U238	5.00E-07	Curies/m3

Comments

5400 Heterogeneous Debris information and data available has not been compiled and reduced to provide a detailed breakdown for the material parameters for each waste stream and waste matrix code. ORNL is implementing a QAPjP for TRU waste characterization in which utilization of process knowledge data will be used to produce more detailed information on material parameters per waste stream. Data submitted was taken from the BIR database.

149001

Paducah Gaseous Diffusion Plant

PADUCAH GASEOUS DIFFUSION PLANT (PA)
WASTE STREAM PROFILES

The following modifications were made by the WTWBIR team in developing the PA waste stream profiles:

- PA submitted a new waste stream with the WTWBIR ID PA-015A. In order to be consistent with the way ID's are assigned this was changed to PA-W016.
- The volumes for the year 1993 were changed from an annual rate of generation (m^3/year) to a cumulative value (m^3).

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME PA

WASTE TYPE MTRU HANDLING CH GENERATOR SITE PA

WASTE STREAM MWIR ID	PA-W014	**STREAM NAME**	Transuranic Waste Liquid
WIPP ID	PA-W014		
Local ID	PA-W014	**DESCRIPTION**	This stream is liquid generated from the shutdown of the C-400 neptunium/technietium recovery system.
MATRIX CODE	1220		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Solidified Inorganics		
Site Matrix Description	Aqueous Slurries - Basic		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		*Unknown*	
				From Treatment of Waste			
				Maintenance			

000677

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME PA

WASTE TYPE MTRU HANDLING CH GENERATOR SITE PA

PA-W014 CONTAINER: Drum
Type/Size: 55 gal in overpack

Container Matl: Steel
Int. Vol/Ctnr: 0.3 m3

Liner Type:
Liner Material:

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.3	0.8	m3
End of 1993:	0.3	0.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Waste material parameters not available.
Isotopic composition not available.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME PA

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE PA

WASTE STREAM MWIR ID	PA-W015	
WIPP ID	PA-W016	
Local ID	PA-W015	
MATRIX CODE	3129	
SITE FINAL FORM IDC		
Waste Matrix Code Group	Solidified Inorganics	
Site Matrix Description	Other Inorganic Sludges	

STREAM NAME TRU Solid

DESCRIPTION This stream includes solid waste generated from the shutdown of the Neptunium/Technetium recovery system. Waste stream consists of spill cleanup and residue. Past analytical data indicates the presence of chromium in the stream.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000673

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME PA

WASTE TYPE MTRU HANDLING CH GENERATOR SITE PA

PA-W015 CONTAINER: Drum
Type/Size: 55 gal in overpacks

Container Matl: Steel
Int. Vol/Ctnr: 0.3 m3

Liner Type:
Liner Material:

Number Stored: 4
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.2	1.2	m3
End of 1993:	1.2	1.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D007A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Waste material parameters not available.
Paducah personnel reported the following ranges for several isotopes in this waste stream:

Tc99	40-950	m Ci/kg
Np237	6-14	m Ci/kg
Pu239	18-91	m Ci/kg
Th230	.01-62	m Ci/kg
U (enr)	900-2400	m Ci/kg

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **PA** WASTE TYPE MTRU HANDLING CH GENERATOR SITE PA

WASTE STREAM MWIR ID	PA-W015A
WIPP ID	PA-W015A
Local ID	PA-W015A
MATRIX CODE	1190
SITE FINAL FORM IDC	
Waste Matrix Code Group	Solidified Inorganics
Site Matrix Description	Unknown solids. Other waste waters.
STREAM NAME	TRU and Technetium Waste - Liquid
DESCRIPTION	This stream includes waste generated from the shutdown of the neptunium/technetium recovery system. Post analytical data indicates the presence of chromium in the stream.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

150909

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME PA

WASTE TYPE MTRU HANDLING CH GENERATOR SITE PA

PA-W015A CONTAINER: Drum
Type/Size: 55-gallon in overpacks

Container Matl: steel
Int. Vol/Ctnr: 0.3 m3

Liner Type:
Liner Material:

Number Stored: 2
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.6	1.5	m3
End of 1993:	0.6	1.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
		Curies/m3
		Curies/m3
		Curies/m3
		Curies/m3
		Curies/m3

Comments

Activities for Th230 and U are not available.
Ranges of activities reported by Paducah for isotopes in this waste stream:

Tc99	4500-5400	m Ci/kg
Np237	28-90	m Ci/kg
Pu239	108-325	m Ci/kg

Pantex Plant

PANTEX (PX)
WASTE STREAM PROFILES

The following modifications were made by the WTWBIR team in developing the PX waste stream profiles:

- Final Waste Form Groups were not provided by PX. In order to permit roll-ups of the data, the WTWBIR team assigned Final Waste Form Groups based on the descriptions and parameters provided by PX.
- The drum volume listed on page 1 of the waste stream form was corrected to 0.208 m^3.
- The number of containers was changed to three to match the volume for the one PX waste stream.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME PX | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE PX

WASTE STREAM MWIR ID	
WIPP ID	PX-T001
Local ID	48
MATRIX CODE	5330
SITE FINAL FORM IDC	
STREAM NAME	Pantex
DESCRIPTION	Weapons dismantlement support material.
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	This material is contaminated PPE and tools generated during weapons dismantlement.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	
				Environmental Restoration			Unknown	X
				From Treatment of Waste				
				Maintenance				

000685

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **PX**

WASTE TYPE TRU HANDLING CH GENERATOR SITE PX

PX-T001

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Metal
Int. Vol/Ctnr: 0.208 m3

Liner Type: bag
Liner Material: 6 ml plastic

Number Stored: 3
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	87.0	78.4	95.8
Cellulosics	0.0	0.0	0.0
Rubber	11.3	10.2	12.4
Plastics	11.3	10.2	12.4
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.6	0.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	7.64E+00	Curies/m3

Rocky Flats Plant

ROCKY FLATS PLANT (RF)
WASTE STREAM PROFILE METHODOLOGY

The approach used and the assumptions made in preparing the RF waste stream profiles are as follows:

- End of 1992 and end of 1993 inventory volumes for TRU-mixed and mixed residues were taken from the Interim Mixed Waste Inventory Report (IMWIR) and the Mixed Waste Inventory Report (MWIR), respectively.
- Projection volumes were taken from the Comprehensive Waste Management Plan (CWMP) with the exception of Solid Stabilization (formerly Residue Elimination). The program projection available for Solid Stabilization at the time the CWMP was being drafted was a "not to exceed" volume. The volume and breakdown of final form waste streams used in preparing the WTWBIR was an updated, projected volume taken from the Conceptual Design Report for Residue Elimination at Rocky Flats, RES-005-001, May 1994.
- The planned treatment for waste streams requiring treatment to meet WIPP WAC and TRAMPAC requirements are taken from the Draft Site Treatment Plan (DSTP) and the Treatment System Definition Report (TSDR) published by the Waste Compliance Programs.
- In the case where the waste stream or some portion of the waste stream requires treatment to change to the final waste form, the volume of waste resulting from the treatment of the original waste stream is included in the final waste form volume of the resulting waste stream. For example, the volume of waste resulting from treatment of Incinerator Ash is included in the final waste form volumes of the resulting waste stream, Solidified Process Solids.
- The following expansion factors were used to determine final waste form volumes resulting from treatment: immobilization of ash, 2.11; immobilization of sludges, 2.21; and all other immobilization treatment, 2.16. These factors were derived from the Technology Evaluation Framework (TEF) published by Waste Compliance Programs. The specific immobilization technology assumed for this purpose was cementation.
- Volume increases due to repackaging waste that exceed the current decay heat limit when no other treatment is required were not included. Waste Characterization Reassessment activities in 1994 resulted in the recharacterization of some waste. Significant changes are noted in the comments field of the affected waste streams.
- To remain consistent with the volumes reported in the IMWIR and the MWIR, 0.21 m^3 was used as the container volume of a standard DOT-17C 55-gallon drum. The volume used for other containers was as specified on the data forms.
- Waste in boxes other than standard waste boxes (SWB) are assumed to be repackaged into SWBs, such that the waste from one 4'x4'x7' box is repacked into two SWBs. Therefore, the final waste form volumes for SWBs include the projected volume increase resulting from such repackaging activities.
- The values for the Typical Waste Material Weights for Final Waste Form data for the TRU waste streams are the same as the corresponding TRU mixed waste streams.

ROCKY FLATS PLANT (RF)
WASTE STREAM PROFILE METHODOLOGY (continued)

- The waste generation rates for each waste form were prorated based on the fraction represented by the waste form on a Waste and Environmental Management System (WEMS) generation report showing actual generation during the period January 1, 1992 through June 30, 1993.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

WASTE STREAM MWIR ID		**STREAM NAME**	Solidified Process Solids/TRM
WIPP ID	RF-M001		
Local ID	RF-806	**DESCRIPTION**	Solidified Homogeneous Solids
MATRIX CODE	3150		
SITE FINAL FORM IDC	806		
Waste Matrix Code Group	Solidified Inorganics		
Site Matrix Description	This waste stream represents the solidified final form of all particulate and sludge type materials. Particulates and sludge type materials are immobilized with Portland cement. The cemented wastes are cast into 1-gallon molds and allowed to cure prior to packaging. This is the final waste form for Firebrick, Pulverized or Fines/TRM (RF-W036), Incinerator Ash/TRM (RF-W040), Particulate Sludge/TRM (RF-W068), and Sand, Slag, and Crucible/TRM (RF-W059). IDC 806 - All inorganic particulate and inorganic sludge waste must be immobilized by processing into a solid and identified as IDC 806.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 114 **TRUCON CODE** RF 114

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste	X			
				Maintenance				

000690

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-M001

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE

Number Stored: 346
Number Projected: 13286

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	68.3
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	489.0	376.2	635.7
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	208.9	160.7	271.6
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	82.7	m3
End of 1993:	0.0	72.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	47.7	139.5	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

TYPICAL EPA CODES APPLICABLE

D002
D003
D004
D005
D006
D007
D008
D009
D010
D011
D018
D019
D035
D040
F001
F002

Comments

Final waste form volumes include treated waste from Firebrick, Pulverized or Fines/TRM, Incinerator Ash/TRM, Particulate Sludge/TRM and Sand, Slag and Crucible/TRM.

Footnotes

1. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.
2. The "Number Stored" field may not reflect the actual number of drums in storage at Rocky Flats, but the number of containers that would be generated if all waste streams that feed into RF-M001 were in final form.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

F003

F005

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM MWIR ID		**STREAM NAME**	Supercompacted Combustibles/TRM
WIPP ID	RF-M002		
Local ID	RF-2116	**DESCRIPTION**	*Supercompacted combustible debris*
MATRIX CODE	5330		
SITE FINAL FORM IDC	2116		
Waste Matrix Code Group	Heterogeneous		
Site Matrix Description	This waste consists of cloth and paper products from cleanup of gloveboxes and spills, which has been supercompacted for volume reduction.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE RF-116C

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste	X			
				Maintenance				

Footnotes

The waste stream supercompacted combustibles/TRM is listed in TRUCON under RF 116C but is listed with "older" IDCs 831, 832, 833.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-M002

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE

Number Stored: 9
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	303.2	0.0	681.8
Rubber	28.8	0.0	681.8
Plastics	87.4	0.0	681.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	301.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	1.9	1.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

F001

F002

F005

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	4.08E+00	Curies/m3
Pu240	1.02E+00	Curies/m3
Pu241	2.44E+01	Curies/m3
Am241	3.46E+00	Curies/m3

Comments

Upper limit assumes a drum can contain all cellulosics, all rubber, or all plastics - actual max is 681.8.
Lower limit assumes that a single drum can contain no cellulosics, rubber or plastics - actual min is 0.

Steel packaging materials assumes 1 overpack drum (55-gal) & 2 pucks (35-gal).
Plastic packaging material assumes 1 PVC liner, 1 P.E. liner and 1 rigid liner.

Footnotes

1. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID		**STREAM NAME**	Cemented Sludge/TRU
WIPP ID	RF-T001		
Local ID	823	**DESCRIPTION**	Uncategorized Inorganic Sludges
MATRIX CODE	3129		
SITE FINAL FORM IDC	823		
Waste Matrix Code Group	Solidified Inorganics		
Site Matrix Description	This waste consists of cemented miscellaneous sludge (IDC 823)		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste	X			
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T001

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE

Number Stored: 35
Number Projected: 28

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	489.0	376.2	635.2
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	208.9	160.7	271.6
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3.2	3.2	m3
End of 1993:	7.4	7.4	m3
1994:	0.2	0.2	m3/yr
1995:	0.2	0.2	m3/yr
1996:	0.2	0.2	m3/yr
1997:	0.2	0.2	m3/ry
1998-2002:	0.2	0.2	m3/yr
2003-2022:	0.2	0.2	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	1.32E-01	Curies/m3
Pu240	3.02E-02	Curies/m3
Pu241	7.20E-01	Curies/m3
Am241	3.80E-01	Curies/m3

Footnotes

1. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

0690

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE TRU   HANDLING CH   GENERATOR SITE RF

WASTE STREAM MWIR ID		**STREAM NAME**	Combustibles/TRU
WIPP ID	RF-T002		
Local ID	821, 822, 825	**DESCRIPTION**	Predominantly Combustible Debris
MATRIX CODE	5330		
SITE FINAL FORM IDC	821&2, 825		
Waste Matrix Code Group	Heterogeneous		
Site Matrix Description	This waste consists mainly of cloth and paper products from cleanup of gloveboxes and spills. This waste includes IDCs 330, 336, 337, 821, 822 and 825.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT   **TRUCON CODE**

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance	X		

000697

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T002

CONTAINER: metal box
Type/Size: 4x4x7
Container Matl: metal
Int. Vol/Ctnr: 3.17 m3
Liner Type:
Liner Material:
Number Stored: 0
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.1	0.0	7.2
Cellulosics	64.2	0.0	481.6
Rubber	6.1	0.0	481.6
Plastics	18.5	0.0	481.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	187.1		
Packaging Material, Plastic	2.2		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3.2	0.0	m3
End of 1993:	3.2	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Assume metal box repacked into 2 SWBs.
Final waste form volumes included in final waste form volumes for SWB.
Typical isotopic composition data is not available for this container type.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T002 | CONTAINER: Standard Waste Box | Type/Size: | Container Matl: metal | Int. Vol/Ctnr: 1.9 m3 | Liner Type: | Liner Material: | Number Stored: 2 | Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.1	0.0	7.2
Cellulosics	64.2	0.0	481.6
Rubber	6.1	0.0	481.6
Plastics	18.5	0.0	481.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	187.1		
Packaging Material, Plastic	2.2		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	3.8	m3
End of 1993:	0.0	3.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

2 as number stored includes waste in metal box requiring repacking to SWBs.
Final waste form volumes include waste repacked from metal boxes into SWBs with 1:2 ratio.
End of 1992 1 metal box repacked into 2 SWBs
End of 1993 1 metal box repacked into 2 SWBs
Typical isotopic composition data is not available for this container type.

Footnotes

1. The number of containers stored (2) includes waste that is presently stored in 4x4x7 metal boxes that *will be repackaged into SWB's.*
2. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

000693

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T002

CONTAINER:	Drum	Container Mat'l:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE

Number Stored: 170
Number Projected: 866

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.1	0.0	7.2
Cellulosics	64.2	0.0	481.6
Rubber	6.1	0.0	481.6
Plastics	18.5	0.0	481.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	25.0	25.0	m3
End of 1993:	35.7	35.7	m3
1994:	25.0	25.0	m3/yr
1995:	10.9	10.9	m3/yr
1996:	8.7	8.7	m3/yr
1997:	1.9	1.9	m3/ry
1998-2002:	2.4	2.4	m3/yr
2003-2022:	6.2	6.2	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	8.90E-01	Curies/m3
Pu240	2.04E-01	Curies/m3
Pu241	4.86E+00	Curies/m3
Am241	9.77E-01	Curies/m3

Footnotes

1. The inventory for this waste stream contains mixed residues (24.15 m3 in 1992 and 39.38 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The 1994 drum inventory reflects an increase of 19.32 m3 which is due to the Waste Characterization Re-assessment effort (5.66 m3 generated + 19.32 m3 transferred to non-mixed = 24.98 m3 represented for annual generation). This volume of waste was re-characterized as non-mixed TRU waste. This inventory of waste was transferred from Waste Stream RF-W012.
3. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | **WASTE TYPE** TRU | **HANDLING** CH | **GENERATOR SITE** RF

WASTE STREAM	MWIR ID	
	WIPP ID	RF-T003
	Local ID	444
MATRIX CODE		3119
SITE FINAL FORM IDC		444

STREAM NAME Gound Glass/TRU

DESCRIPTION Uncategorized Inorganic Particulates

Waste Matrix Code Group Inorganic Non-metal

Site Matrix Description This waste was recharacterized in 1994 as mixed TRU waste. See Ground Glass/TRM. (RF-W032)

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 118

TRUCON CODE RF 118

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance	X			

000701

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

RF-T003 CONTAINER: metal box
Type/Size: 4x4x7'

Container Matl: metal
Int. Vol/Ctnr: 3.17 m3

Liner Type: fiberboard
Liner Material:

Number Stored: 1
Number Projected: -1

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	137.5	77.7	215.5
Cellulosics	1.1	1.1	1.1
Rubber	1.1	1.1	1.1
Plastics	19.8	19.8	19.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	187.1		
Packaging Material, Plastic	2.2		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3.2	0.0	m3
End of 1993:	3.2	0.0	m3
1994:	-3.2	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

This waste was recharacterized as Ground Glass/TRM (RF-W032) as part of waste characterization reassessment effort.
Typical isotopic composition data is not available for this container.

Footnotes

1. The 1994 box inventory reflects a decrease of 3.17 m3 (one 4'x4'x7' metal box) which is due to the Waste Characterization Re-assessment effort. This volume of waste was re-characterized as TRU Mixed waste (previously considered non-mixed TRU). This inventory of waste was transferred to Waste Stream RF-W032.
2. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

WASTE STREAM MWIR ID		**STREAM NAME**	Misc. Pu Recovery By-Product/TRU
WIPP ID	RF-T004		
Local ID	411,412,414,409	**DESCRIPTION**	Salts
MATRIX CODE	3141		
SITE FINAL FORM IDC	411, 412		
Waste Matrix Code Group	Salt Waste		

Site Matrix Description: This waste is generated during plutonium recovery operations such as direct oxide reduction, molten salt extration, electrorefining, and salt scrub. (IDCs 409, 411, 412, 414)

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 124

TRUCON CODE RF 124

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

003700

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T004

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: metal
Int. Vol/Ctnr: 0.21 m3

Liner Type: rigid
Liner Material: HDPE/fiberboar

Number Stored: 0
Number Projected: 42

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	23.8	4.8	28.6
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	261.9	124.3	719.1
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.4	0.4	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	3.73E+01	Curies/m3
Pu240	8.55E+00	Curies/m3
Pu241	2.03E+02	Curies/m3
Am241	4.23E-01	Curies/m3

Comments

Assume typical isotopic composition is same as Misc. Pu Recovery By-Product/TRM

Footnotes

1. The inventory for this waste stream contains mixed residues (1.47 m3 in 1992 and 0.74 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID	
WIPP ID	RF-T005
Local ID	292, 299, 372
MATRIX CODE	3129
SITE FINAL FORM IDC	n/a
STREAM NAME	Particulate Sludge/TRU
DESCRIPTION	Uncategorized Inorganic Sludge
Waste Matrix Code Group	Solidified Inorganics
Site Matrix Description	This waste was generated from plutonium recovery operations in Building 771. The waste consists of IDCs 292, 299, and 372. This waste is packaged in 55-gallon drums with multiple bag liners. Final waste form for this waste is Solidified Process Solids/TRU (IDC 806).

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste	X		
				Maintenance			

607705

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T005

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE

Number Stored: 0
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	68.3
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	489.0	376.2	635.7
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	208.9	160.7	271.6
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.0	m3
End of 1993:	0.4	0.0	m3
1994:	0.8	0.0	m3/yr
1995:	1.7	0.0	m3/yr
1996:	1.3	0.0	m3/yr
1997:	0.1	0.0	m3/ry
1998-2002:	0.3	0.0	m3/yr
2003-2022:	0.5	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	2.41E+01	Curies/m3
Pu240	5.52E+00	Curies/m3
Pu241	1.31E+02	Curies/m3
Am241	0.00E+00	Curies/m3

Footnotes

1. This waste stream must be immobilized to meet WIPP WAC. After treatment it is converted to IDC 806 and the final waste form volumes are transferred to Waste Stream RF-T006 with a volume increase of 1 : 2.21.
2. These typical waste densities are for the final waste forms (RF-T006).

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM

MWIR ID	
WIPP ID	RF-T006
Local ID	306
MATRIX CODE	
SITE FINAL FORM IDC	806

STREAM NAME Solidified Process Solids/TRU

DESCRIPTION *Final waste form for Particulate Sludges after treatment*

Waste Matrix Code Group Solidified Inorganics

Site Matrix Description This waste stream represents the solidified final form of all particulate and sludge type materials. Particulates and sludge type materials are immobilized with Portland cement. The cemented wastes are cast into 1-gallon molds and allowed to cure prior to packaging. This is the final waste form for Firebrick, Pulverized or Fines/TRM (RF-W036), Incinerator Ash/TRM (RF-W040), Particulate Sludge/TRM (RF-W068), and Sand, Slag, and Crucible/TRM (RF-W059). IDC 806 - All inorganic particulate and inorganic sludge waste must be immobilized by processing into a solid and identified as IDC 806.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 114

TRUCON CODE RF 114

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste	X		
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T006 | CONTAINER: Drum | Type/Size: 55-gallon

Container Matl: metal | Int. Vol/Ctnr: 0.21 m3

Liner Type: rigid | Liner Material: HDPE

Number Stored: 3 | Number Projected: 165

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	68.3
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	489.0	376.2	635.7
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	208.9	160.7	271.6
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.9	m3
End of 1993:	0.0	0.9	m3
1994:	0.0	1.8	m3/yr
1995:	0.0	3.8	m3/yr
1996:	0.0	3.0	m3/yr
1997:	0.0	0.3	m3/ry
1998-2002:	0.0	0.6	m3/yr
2003-2022:	0.0	1.1	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	3.50E+01	Curies/m3
Pu240	8.01E+00	Curies/m3
Pu241	1.91E+02	Curies/m3
Am241	4.76E+00	Curies/m3

Comments

Final waste form volumes include final waste form volumes from Particulate Sludges/TRU after treatment.

Footnotes

1. Final waste form volumes include treated waste from RF-T005 and RF-T076.
2. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.
3. The "Number Stored" field may not reflect the actual number of drums in storage, but the number of drums that would be generated if all waste streams that feed into RF-T006 were in final form.

8402098

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID	
WIPP ID	RF-T007
Local ID	2216
MATRIX CODE	5330
SITE FINAL FORM IDC	2216
STREAM NAME	Supercompacted Combustibles/TRU
DESCRIPTION	Supercompacted combustible debris.
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	This waste consists of cloth and paper products from cleanup of gloveboxes and spills which as been supercompacted for volume reduction.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE RF 116C

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste	X		
				Maintenance			

Footnotes

This waste stream is listed in TRUCON but under "older" IDCs 831, 832, 833.

000709

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

RF-T007

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: metal
Int. Vol/Ctnr: 0.21 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	303.2	0.0	681.8
Rubber	28.8	0.0	681.8
Plastics	87.4	0.0	681.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	301.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.2	0.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239		Curies/m3
Pu240		Curies/m3
Pu241		Curies/m3
Am241		Curies/m3

Comments

Upper limit assumes a drum can contain all cellulosics, all rubber, or all plastics - actual max is 681.8.
Lower limit assumes that a single drum can contain no cellulosics, rubber or plastics - actual min is near zero.

Steel packaging materials assumes 1 overpack drum (55-gal) & 2 pucks (35-gal).
Plastic packaging materials assumes 1 PVC liner, 1 P.E. liner and 1 rigid liner.

Activity on these radionuclides is unknown.

Footnotes

1. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

9417009

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID		**STREAM NAME**	Aqueous Sludge/TRU
WIPP ID	RF-T010		
Local ID	800, 803, 807	**DESCRIPTION**	Solidified Process Residues
MATRIX CODE	3150		
SITE FINAL FORM IDC	800, 803		

Waste Matrix Code Group: Solidified Inorganics

Site Matrix Description: This waste stream consists of aqueous sludge from wastewater treatment mixed with 30% Portland cement. IDC No. 800, 803, 807. The waste is generated as a result of process waste water treatment in Building 374 and 774. Aqueous sludge is produced by vacuum filtration of precipitated solids from pretreated aqueous waste slurry. Entrapped solids are skimmed off the surface of the filter medium of the rotating drum as wet sludge. The recipitated solids are chiefly hydroxides with pH of 10-12. The final waste form is obtained by mixing the wet sludge with approximately 30% Portland cement. RFP has several drums of aqueous sludge that were returned by INEL. These old drums were packaged by alternating the layers of cement and wet sludge or by adding cement to the top and bottom of a drum containing wet sludge. This older waste is described by IDC's 001, 002, and 007.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 111 | **TRUCON CODE** RF 111

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste	X		
				Maintenance			

112000

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T010

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: metal
Int. Vol/Ctnr: 0.21 m3
Liner Type: rigid
Liner Material: HDPE
Number Stored: 3
Number Projected: 121

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	395.6	44.2	767.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	400.5	44.3	767.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	64.8		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.6	0.6	m3
End of 1993:	0.6	0.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.2	0.2	m3/yr
1996:	0.3	0.3	m3/yr
1997:	0.3	0.3	m3/ry
1998-2002:	0.6	0.6	m3/yr
2003-2022:	1.1	1.1	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	5.16E-01	Curies/m3
Pu240	1.18E-01	Curies/m3
Pu241	2.81E+00	Curies/m3
Am241	2.03E+00	Curies/m3

Footnotes

1. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

WASTE STREAM

MWIR ID	
WIPP ID	RF-T011
Local ID	480
MATRIX CODE	5112
SITE FINAL FORM IDC	480

STREAM NAME: Metal/TRU

DESCRIPTION: Metal debris

Waste Matrix Code Group: Uncategorized Metal

Site Matrix Description: IDCs 480 and 481. This waste includes items such as gloveboxes and machinery, and empty containers. Items that are difficult to reduce to a size that would fit in a 55-gal. drum are placed in DOT 7A, Type A metal boxes. These drums are lined with a rigid polyethylene liner, fiberboard liner and several bag liners. The boxes are lined with a fiberboard and PVC liner. This waste also includes final form waste of classified metal (IDC Nos. 484, 485,486, 489) after processing to declassified form. Inventory data include residues in IDCs 480 and 481.

NO MIGRATION VARIANCE PETITION ASSIGNMENT: RF 117

TRUCON CODE: RF 117

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues	X	Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

013700

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

RF-T011

CONTAINER: plywood box
Type/Size: 4x4x7

Container Matl: plywood
Int. Vol/Ctnr: 0 m3

Liner Type:
Liner Material:

Number Stored: 0
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	171.3	1.7	695.4
Aluminum-Based Metals/Alloys	18.6	0.0	238.9
Other Metals	16.5	0.0	67.0
Other Inorganic Materials	19.6	0.0	79.6
Cellulosics	5.5	0.0	22.3
Rubber	0.0	0.0	0.0
Plastics	10.1	0.0	41.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	187.1		
Packaging Material, Plastic	2.2		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3.2	0.0	m3
End of 1993:	3.2	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Assume waste in plywood box is repackaged into SWBs with 1:2 ratio.
End of 1992 - 1 plywood box repacked into 2 SWBs
End of 1993 - 1 plywood box repacked into 2 SWBs
Final waste form volumes included in final waste form volumes for SWBs.
Typical isotopic composition is not available for this container type.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **RF** | WASTE TYPE: TRU | HANDLING: CH | GENERATOR SITE: RF

RF-T011

CONTAINER:	metal box	Container Matl:	metal	Liner Type:	
Type/Size:	4x4x7	Int. Vol/Ctnr:	0 m3	Liner Material:	
Number Stored:	0	Number Projected:	0		

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	171.3	1.7	695.4
Aluminum-Based Metals/Alloys	18.6	0.0	238.9
Other Metals	16.5	0.0	67.0
Other Inorganic Materials	19.6	0.0	79.6
Cellulosics	5.5	0.0	22.3
Rubber	0.0	0.0	0.0
Plastics	10.1	0.0	41.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	187.1		
Packaging Material, Plastic	2.2		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	41.2	0.0	m3
End of 1993:	41.2	0.0	m3
1994:	-19.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Assume waste in metal boxes is repackaged into SWBs with 1:2 ratio.
End of 1992 - 13 metal boxes repacked into 26 SWBs
End of 1993 - 13 metal boxes repacked into 26 SWBs
Final form waste volumes included in final form waste volumes for SWBs.

Footnotes

1. The 1994 4'x4'x7' metal waste box inventory reflects a decrease of 19.02 m3 which is due to the Waste Characterization Re-assessment effort. This volume of waste was re-characterized as TRU Mixed waste (previously considered non-mixed TRU). This inventory of waste was transferred to Waste Stream RF-W011.
2. The typical waste densities for this container were derived for the SWB.

51 17009

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T011

CONTAINER: Standard Waste Box
Type/Size:

Container Matl: metal
Int. Vol/Ctnr: 1.9 m3

Liner Type: Bag/rigid
Liner Material: PVC/fiberboard

Number Stored: 29
Number Projected: -14

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	171.3	1.7	695.4
Aluminum-Based Metals/Alloys	18.6	0.0	238.9
Other Metals	16.5	0.0	67.0
Other Inorganic Materials	19.6	0.0	79.6
Cellulosics	5.5	0.0	22.3
Rubber	0.0	0.0	0.0
Plastics	10.1	0.0	41.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	187.1		
Packaging Material, Plastic	2.2		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.9	55.1	m3
End of 1993:	1.9	55.1	m3
1994:	0.0	-26.6	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Typical isotopic composition data is not available for this container type.

Footnotes

1. The 1994 SWB waste box inventory reflects a decrease of 38.04 m3 (11.44 m3 newly generated - 38.04 m3 re-characterized = -26.6 m3) which is due to the Waste Characterization Re-assessment effort. This volume of waste was re-characterized as TRU Mixed waste (previously considered non-mixed TRU). This inventory of waste was transferred to Waste Stream RF-W011.
2. *The SWB final waste form volumes reflect repackaging waste that is currently* in 4'x4'x7' metal and plywood boxes into SWBs at a ratio of 1:2 (one 4'x4'x7' box into two SWBs.
3. The number of containers stored (29) and number of projected (-14) includes waste that is presently stored in 4x4x7 metal boxes that will be repackaged into SWBs.
4. The number of containers stored is for the year 1993. The number of *containers projected is for the years 1994 - 2022.*

9117003

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T011

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: metal
Int. Vol/Ctnr: 0.21 m3

Liner Type: rigid
Liner Material: HDPE/fiberboar

Number Stored: 171
Number Projected: 487

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	171.3	1.7	695.4
Aluminum-Based Metals/Alloys	18.6	0.0	238.9
Other Metals	16.5	0.0	67.0
Other Inorganic Materials	19.6	0.0	79.6
Cellulosics	5.5	0.0	22.3
Rubber	0.0	0.0	0.0
Plastics	10.1	0.0	41.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	32.3	32.3	m3
End of 1993:	35.9	35.9	m3
1994:	7.0	7.0	m3/yr
1995:	15.4	15.4	m3/yr
1996:	7.8	7.8	m3/yr
1997:	0.9	0.9	m3/ry
1998-2002:	1.5	1.5	m3/yr
2003-2022:	3.2	3.2	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	1.24E+00	Curies/m3
Pu240	2.84E-01	Curies/m3
Pu241	6.76E+00	Curies/m3
Am241	9.54E-01	Curies/m3

Footnotes

1. The inventory for this waste stream contains mixed residues (14.28 m3 in 1992 and 6.11 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.
3. The typical waste densities for this container were derived for the SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

WASTE STREAM MWIR ID	
WIPP ID	RF-T036
Local ID	377
MATRIX CODE	3119
SITE FINAL FORM IDC	377
STREAM NAME	Firebrick, Pulverized or Fines/TRU
DESCRIPTION	Uncategorized Inorganic Particulates
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	This waste stream was previously named "Firebrick - Pulverized or Fines." IDC No. 377 and 378. This waste is generated from replacement of fire brick in the plutonium recovery incinerator in Building 771. The fire brick must be replaced periodically because of the plutonium buildup. The fire brick is pulverized to facilitate plutonium recovery. Material which assays below the economic discard limit is discarded as pulverized fire brick waste. The waste is packaged in 55-gallon drums lined with a rigid polyethylene liner. Inventory data include residues in the same IDCs. IDC 377 - Waste from IDC 371 which is smaller than one inch diameter and larger than 1/4 inch diameter. IDC 378 - Particulate firebrick residue from recovery or particulate firebrick waste for discard. This IDC must be processed into IDC 806 (RF-T06).

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 122

TRUCON CODE RF 122

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

0007718

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | **WASTE TYPE** TRU | **HANDLING** CH | **GENERATOR SITE** RF

RF-T036

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE/fiberboar

Number Stored: 6
Number Projected: 10

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	104.4	44.5	263.0
Cellulosics	28.9	14.5	57.7
Rubber	0.0	0.0	0.0
Plastics	19.2	9.6	38.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3.4	3.4	m3
End of 1993:	1.3	1.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.1	0.1	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	1.50E+00	Curies/m3
Pu240	3.43E-01	Curies/m3
Pu241	8.17E+00	Curies/m3
Am241	0.00E+00	Curies/m3

Footnotes

1. The inventory for this waste stream contains mixed residues (0.21 m3 in 1992 and 0.21 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | **WASTE TYPE** TRU | **HANDLING** CH | **GENERATOR SITE** RF

WASTE STREAM MWIR ID	
WIPP ID	RF-T037
Local ID	320
MATRIX CODE	5190
SITE FINAL FORM IDC	320
STREAM NAME	Heavy Metal (non-SS)/TRU
DESCRIPTION	Uncategorized metal debris
Waste Matrix Code Group	Uncategorized Metal
Site Matrix Description	IDC No. 320 Heavy (non-SS) metal waste is generated at various locations throughout the RFP. Heavy scrap metals is defined at RFP as metal elements above Cu on the periodic chart. In 1987, IDC 321 was created specifically for lead. Prior to this, lead was not segregated from IDC 320. Typically, these scrap metals consist of crucibles, funnels, rods and fixturing from several processes and production operations. Tantalum, tungsten and platinum are examples of scrap metals at the RFP. Inventory data include residues in IDC 320. IDC 320 - Scrap metals which are heavier than iron and steel. Metal above Cu on the periodic table. Mainly used tantalum crucibles.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 117 | **TRUCON CODE** RF 117

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance	X		

000720

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **RF** | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T037

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE/fiberboar

Number Stored: 6
Number Projected: 18

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	57.8	0.0	317.3
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	134.8	44.5	1057.7
Other Inorganic Materials	13.3	0.0	19.2
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.4		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.4	m3
End of 1993:	1.3	1.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.2	0.2	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	9.69E+00	Curies/m3
Pu240	2.22E+00	Curies/m3
Pu241	5.28E+01	Curies/m3
Am241	0.00E+00	Curies/m3

Footnotes

1. The inventory for this waste stream contains mixed residues (0 m3 in 1992 and 0.21 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. *The number of containers stored is for the year 1993.* The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

WASTE STREAM MWIR ID	
WIPP ID	RF-T038
Local ID	802
MATRIX CODE	3121
SITE FINAL FORM IDC	802
STREAM NAME	Soliified Lab Waste/TRU
DESCRIPTION	
Waste Matrix Code Group	Solidified Inorganics
Site Matrix Description	IDC No. 802. This waste stream is liquid waste solidified with Portland Cement. This waste consists of waste liquids from the analytical labs, research and development laboratories, and maintenance shops which are packaged and sent to Building 774 for immobilization with Portland cement and absorbent cement. These are wastes which are incompatible with the process collection system and the liquid waste treatment plant. Acidic wastes are neutralized before immobilization. Immobilization is done in 55-gallon drums. Approximately 21 gallons of waste are added to each drum prior to storage. This waste steam is newly identified since the Storage and Inventory Report.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 113

TRUCON CODE RF 113

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste	X			
				Maintenance				

00072?

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF — WASTE TYPE TRU — HANDLING CH — GENERATOR SITE RF

RF-T038

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid	Number Stored:	8
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE	Number Projected:	132

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	935.0	311.7	1122.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	333.0	238.0	476.2
Solidified, Organic matrix	0.0	0.0	567.3
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	64.8		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.7	1.7	m3
End of 1993:	2.1	2.1	m3
1994:	8.1	8.1	m3/yr
1995:	11.2	11.2	m3/yr
1996:	8.4	8.4	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	1.79E-01	Curies/m3
Pu240	4.10E-02	Curies/m3
Pu241	9.76E-01	Curies/m3
Am241	3.15E+00	Curies/m3

Footnotes

1. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **RF** | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID		**STREAM NAME**	Glass/TRU
WIPP ID	RF-T052	**DESCRIPTION**	Glass debris
Local ID	440,441,442,856		
MATRIX CODE	5122		
SITE FINAL FORM IDC	440, 441		
Waste Matrix Code Group	Inorganic Non-metal		

Site Matrix Description: This waste stream is glass from D&D, labs, etc. IDC 440, 441, 442, 856. This waste stream is made up of glass from analytical labs, recovery processes, ceramics, and glovebox windows. This waste stream was previously named "Glass." Inventory data include residues in the same IDCs. This waste form has been characterized by TCLP analytical data and process knowledge. Ground glass is characterized by process knowledge and limited analytical data.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 118

TRUCON CODE RF 118

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance	X		

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T052

CONTAINER: metal box
Type/Size: 4x4x7

Container Matl: metal
Int. Vol/Ctnr: 0 m3

Liner Type:
Liner Material:

Number Stored: 0
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	244.3	20.7	466.5
Cellulosics	1.1	0.0	1.1
Rubber	1.1	0.0	1.1
Plastics	19.8	0.0	19.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	187.1		
Packaging Material, Plastic	2.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	31.7	0.0	m3
End of 1993:	31.7	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Assume waste in metal boxes is repackaged into SWBs with 1:2 ratio.
End of 1992 - 10 metal boxes repacked into 20 SWBs
End of 1993 - 10 metal boxes repacked into 20 SWBs
Final waste form volumes included in final waste form volumes for SWBs
Typical isotopic composition data is not available for this container type.

Footnotes

The typical waste densities for this container were derived for the SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

RF-T052

CONTAINER: Standard Waste Box
Type/Size:

Container Matl: metal
Int. Vol/Ctnr: 1.9 m3

Liner Type: Bag/rigid
Liner Material: PVC/fiberboard

Number Stored: 20
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	244.3	20.7	466.5
Cellulosics	1.1	0.0	1.1
Rubber	1.1	0.0	1.1
Plastics	19.8	0.0	19.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	187.1		
Packaging Material, Plastic	2.2		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	38.0	m3
End of 1993:	0.0	38.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Final waste form volumes include waste repackaged from metal boxes.
Typical isotopic composition data is not available for this container type.

Footnotes

1. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.
2. The number of containers stored (20) includes waste that is presently stored in 4x4x7 metal boxes that will be repackaged into SWBs.

000726

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | **WASTE TYPE** TRU | **HANDLING** CH | **GENERATOR SITE** RF

RF-T052

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: metal
Int. Vol/Ctnr: 0.21 m3
Liner Type: rigid
Liner Material: HDPE/fiberboar
Number Stored: 220
Number Projected: 33

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	244.3	20.7	466.5
Cellulosics	1.1	0.0	1.1
Rubber	1.1	0.0	1.1
Plastics	19.8	0.0	19.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	56.5	56.5	m3
End of 1993:	46.2	46.2	m3
1994:	1.4	1.4	m3/yr
1995:	1.9	1.9	m3/yr
1996:	1.4	1.4	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.1	0.1	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	1.71E+00	Curies/m3
Pu240	3.91E-01	Curies/m3
Pu241	9.30E+00	Curies/m3
Am241	0.00E+00	Curies/m3

Comments

Site final form IDC also includes 442 and 856.

Footnotes

1. The inventory for this waste stream contains mixed residues (0.63 m3 in 1992 and 3.37 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

0001727

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID		**STREAM NAME**	Mg Oxide Crucibles/TRU
WIPP ID	RF-T056		
Local ID	368, 370	**DESCRIPTION**	Ceramic/Brick Debris
MATRIX CODE	5123		
SITE FINAL FORM IDC	368, 370		

Waste Matrix Code Group: Inorganic Non-metal

Site Matrix Description: IDCs 370, 368 and 655. This waste stream includes any type or size of ceramic crubicles or liners including LECO crucibles. This waste consists of magnesium oxide ceramic crucible, magnesium oxide crucible fragments with reactive salts of calcium, magnesium, sodium, and/or potassium adhering to the surface and containing plutonium residue. This waste stream was generated during plutonium recovery using pyrochemical and electro-chemical processing. Waste is placed in 4-liter poly bottles and double plastic bagged or placed in 1 gallon or 1 quart paint cans then placed into 55-gallon drums. Inventory data include residues in IDC 368.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 118

TRUCON CODE RF 118

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos		
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs		
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other		
Unknown		Unknown		Decon and Decommissioning			N/A	X	
				Environmental Restoration			Unknown		
				From Treatment of Waste					
				Maintenance					

000728

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T056

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE

Number Stored: 6
Number Projected: 3

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	11.9	0.0	23.8
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	370.2	111.0	828.4
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	26.9	0.0	53.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE .ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.9	1.9	m3
End of 1993:	1.3	1.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	2.21E+01	Curies/m3
Pu240	5.06E+00	Curies/m3
Pu241	1.20E+02	Curies/m3
Am241	0.00E+00	Curies/m3

Footnotes

1. *The inventory for this waste stream contains mixed residues* (1.26 m3 in 1992 and 0 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

000729

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID		STREAM NAME	Insulation/TRU
WIPP ID	RF-T057	DESCRIPTION	Uncategorized inorganic non-metal debris
Local ID	438		
MATRIX CODE	5129		
SITE FINAL FORM IDC	438		
Waste Matrix Code Group	Inorganic Non-metal		

Site Matrix Description: IDC 438 - This waste stream is contaminated insulation. The insulation is generated from construction and demolition onsite. This waste was characterized using process knowledge for manifesting purposes is 1987 and 1989 to determine if any reportable quantities per 49 CFR 172 were present. No laboratory analyses of these waste for RCRA hazardous constituents have been conducted.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 122

TRUCON CODE RF 122

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance	X			

000730

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T057

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE

Number Stored: 32
Number Projected: 18

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	84.7	2.2	362.8
Cellulosics	4.8	0.0	9.6
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	6.7	6.7	m3
End of 1993:	6.7	6.7	m3
1994:	0.7	0.7	m3/yr
1995:	0.1	0.1	m3/yr
1996:	0.1	0.1	m3/yr
1997:	0.1	0.1	m3/ry
1998-2002:	0.1	0.1	m3/yr
2003-2022:	0.1	0.1	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	4.67E+00	Curies/m3
Pu240	1.07E+00	Curies/m3
Pu241	2.54E+01	Curies/m3
Am241	0.00E+00	Curies/m3

Footnotes

1. The inventory for this waste stream contains mixed residues (0.42 m3 in 1992 and 0.63 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

000731

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE: TRU | HANDLING: CH | GENERATOR SITE: RF

WASTE STREAM MWIR ID		**STREAM NAME**	Sand, Slag and Crucible/TRU
WIPP ID	RF-T059	**DESCRIPTION**	
Local ID	392, 398		
MATRIX CODE	3119		
SITE FINAL FORM IDC	392, 398		
Waste Matrix Code Group	Solidified Inorganics		
Site Matrix Description	This waste includes unpulverized sand, slag, and crucible (IDC 392) and pulverized sand, slag, and crucible (IDC 398).		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000732

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T059

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE

Number Stored: 0
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	68.3
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	489.0	376.2	635.7
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	208.9	160.7	271.6
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Footnotes

1. The inventory for this waste stream contains mixed residues (4.41 m3 in 1992 and 0 m3 in 1993). This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

WASTE STREAM MWIR ID		**STREAM NAME**	Coarse Graphite/TRU
WIPP ID	RF-T060		
Local ID	303, 312	**DESCRIPTION**	Graphite Debris
MATRIX CODE	3119		
SITE FINAL FORM IDC	303, 312		
Waste Matrix Code Group	Graphite		
Site Matrix Description	This waste form includes scarfed graphite chunks (IDC 303) and coarse graphite (IDC 312). This waste is a result of broken graphite molds from the classified weapons shape casting process. Solid. The cadmium is present as contaminated salt residues on the graphite.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 115

TRUCON CODE RF 115

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000734

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF   WASTE TYPE TRU   HANDLING CH   GENERATOR SITE RF

RF-T060   CONTAINER: Drum   Type/Size: 55-gallon

Container Matl: metal   Int. Vol/Ctnr: 0.21 m3

Liner Type: rigid   Liner Material: HDPE/fiberboar

Number Stored: 84   Number Projected: 32

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	17.3
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	312.6	51.8	386.6
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	17.9	17.9	m3
End of 1993:	17.6	17.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.3	0.3	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	5.38E+00	Curies/m3
Pu240	1.23E+00	Curies/m3
Pu241	2.93E+01	Curies/m3
Am241	0.00E+00	Curies/m3

Footnotes

1. The inventory for this waste stream contains mixed residues (86.94 m3 in 1992 and 87.07 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

WASTE STREAM

MWIR ID	
WIPP ID	RF-T063
Local ID	070,400,401,500
MATRIX CODE	1190
SITE FINAL FORM IDC	

STREAM NAME: Miscellaneous Liquids/TRU

DESCRIPTION: Uncategorized Wastewaters

Waste Matrix Code Group: Solidified Inorganics

Site Matrix Description: IDC No. 070, 400, 401, 500, 503, 508, 527, and 541. As result of the shutdown of plutonium operations at RFP In November, 1989, several hundred plastic bottles and several tanks of process liquids remained in storage in Buildings 371, 559, 771, and 779. These liquids are included in the list of residues. Basis for the five-year projected generation is an estimate of the past three years generation history.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000736

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **RF** WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

RF-T063

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.3	0.0	m3
End of 1993:	0.3	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Footnotes

1. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **RF** | WASTE TYPE: TRU | HANDLING: CH | GENERATOR SITE: RF

WASTE STREAM MWIR ID	
WIPP ID	RF-T066
Local ID	335,342,490,491
MATRIX CODE	5410
SITE FINAL FORM IDC	335,342,490,49
STREAM NAME	Filters and Media/TRU
DESCRIPTION	Composite filters
Waste Matrix Code Group	Filter
Site Matrix Description	This waste stream was previously named "Filter Waste/TRU." IDC No. 328, 331, 335, 342, 376, 490, 491, 492. Filter waste is generated from process operations throughout the plant site. This waste consists of Ful-flo filters from the Building 771 incinerator (IDC 328), ful-flo filters from non-incineration operations (IDC 331), absolute glovebox filters from non-acid contaminated operations (IDC 335), acid contaminated absolute glovebox filters (IDC 342), acid contaminated HEPA filters (IDC 492), non-acid contaminated HEPA filters (IDC 492), plenum prefilters (IDC 491), filter media (IDC 338), and processed filter media (IDC 376). Processed filter media is material which has been treated using Portland cement to absorb moisture and neutralize acid contamination. Filter waste is packaged in 55-gallon drums and metal standard waste boxes. Inventory data include residues within the same IDCs.

NO MIGRATION VARIANCE PETITION ASSIGNMENT: RF 119

TRUCON CODE: RF 119

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000738

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T066

CONTAINER:	metal box	Container Matl:	metal	Liner Type:	
Type/Size:	4x4x7	Int. Vol/Ctnr:	0 m3	Liner Material:	

Number Stored: 0
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	595.3
Aluminum-Based Metals/Alloys	42.1	0.0	440.7
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	15.0	0.0	154.8
Cellulosics	104.8	0.0	496.1
Rubber	1.1	0.0	11.3
Plastics	0.0	0.0	595.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	187.1		
Packaging Material, Plastic	2.2		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	6.3	0.0	m3
End of 1993:	6.3	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide *Activity*

Comments

Assume waste in metal boxes is repackaged in SWBs with 1:2 ratio.
Final waste form volumes included in final waste form volumes for SWBs.
End of 1992 2 metal boxes repacked to 4 SWBs.
End of 1993 2 metal boxes repacked to 4 SWBs.
Typical isotopic composition data is not available for this container type.

Footnotes

The typical waste densities for this container were derived for the SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T066

CONTAINER:	Standard Waste Box	Container Matl:	metal	Liner Type:	rigid
Type/Size:		Int. Vol/Ctnr:	1.9 m3	Liner Material:	fiberboard

Number Stored: 11
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	595.3
Aluminum-Based Metals/Alloys	42.1	0.0	440.7
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	15.0	0.0	154.8
Cellulosics	104.8	0.0	496.1
Rubber	1.1	0.0	11.3
Plastics	0.0	0.0	596.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	187.1		
Packaging Material, Plastic	2.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	13.3	20.9	m3
End of 1993:	13.3	20.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Final waste form volumes include waste repackaged from metal boxes.
Typical isotopic composition data is not available for this container type.

Footnotes

1. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.
2. The number of containers stored (11) includes waste that is presently stored in 4x4x7 metal boxes that will be repackaged into SWBs.

0002740

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T066

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	Rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE/fiberboar

Number Stored: 80
Number Projected: 636

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	23.9	0.0	440.7
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	8.3	0.0	154.8
Cellulosics	30.0	0.0	496.1
Rubber	1.3	0.0	11.3
Plastics	88.0	0.0	595.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	24.6	24.4	m3
End of 1993:	17.0	16.8	m3
1994:	2.0	2.0	m3/yr
1995:	3.2	3.2	m3/yr
1996:	2.4	2.4	m3/yr
1997:	0.1	0.1	m3/ry
1998-2002:	0.1	0.1	m3/yr
2003-2022:	6.3	6.3	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	6.10E+00	Curies/m3
Pu240	1.40E+00	Curies/m3
Pu241	3.32E+01	Curies/m3
Am241	0.00E+00	Curies/m3

Comments

Site final form IDC also includes 490 and 491.
IDC 331 must be immobilized to convert to IDC 376.
The following volumes were included in the final waste form volumes for Cemented Filters/TRU to reflect the immobilization of IDC 331:
End of 1992 .21m3 x 2.16 = .45m3
End of 1993 .21m3 x 2.16 = .45m3

Footnotes

1. The inventory for this waste stream contains mixed residues (32.97 m3 in 1992 and 38.01 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The final waste form drum volumes for 1992 and 1993 show a decrease of 0.21 m3 as a result of processing IDC 331 waste and transferring to Waste Stream RF-T067.
3. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

0017 41

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID		STREAM NAME	Cemented Filters/TRU
WIPP ID	RF-T067	DESCRIPTION	Composite Filters
Local ID	376		
MATRIX CODE	5410		
SITE FINAL FORM IDC	376		

Waste Matrix Code Group: Filter

Site Matrix Description: This waste stream was previously named "Filter Wastes/TRU." IDC No. 338 and 376. Filter waste is generated from process operations throughout the plant site. Processed filter media, DC 376, is material which has been treated using Portland cement to absorb moisture and neutralize acid contamination. Filter waste is packaged in 55-gallon drums and metal standard waste boxes. Inventory data include residues within the same IDCs because they are regulated as waste.

NO MIGRATION VARIANCE PETITION ASSIGNMENT: RF 119

TRUCON CODE: RF 119

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste	X		
				Maintenance			

000742

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T067

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE

Number Stored: 6
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	4.8	0.0	24.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	113.3	26.9	342.4
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	14.4	0.0	38.5
Solidified, Inorganic matrix	141.5	33.6	427.6
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.6	1.1	m3
End of 1993:	0.6	1.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	6.61E+00	Curies/m3
Pu240	1.51E+00	Curies/m3
Pu241	3.60E+01	Curies/m3
Am241	0.00E+00	Curies/m3

Footnotes

1. The inventory for this waste stream contains mixed residues (0.21 m3 in 1992 and 0.21 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The final waste form volumes for 1992 and 1993 include 0.45 m3 from the treatment of IDC 331 from Waste Stream RF-T066.
3. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

WASTE STREAM	MWIR ID	
	WIPP ID	RF-T069
	Local ID	430, 431, 809
MATRIX CODE		3212
SITE FINAL FORM IDC		809

STREAM NAME Organic Resins/TRU

DESCRIPTION Organic resins

Waste Matrix Code Group: Solidified Organics

Site Matrix Description: This waste stream was previously named "Particulate-Sludge/TRU." IDC No. 430 and 431. This waste was generated from plutonium recovery operations in Building 771. It consists of unleached resin (IDC 430) and leached resin (IDC 431). The particulate and sludge (TRU mixed) waste (discussed in the National Report on Prohibited Wastes and Treatment Options and in Treatment Report No. 1) are unleached ion exchange resin (IDC 430) and Leached resin (IDC 431). The waste is packaged in 55-gallon drums with multiple bag liners. Inventory data include residues in these IDCs. Final waste form for this waste stream is cemented resin (IDC 809).

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 126

TRUCON CODE RF 126

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste	X			
				Maintenance				

000744

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T069

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: metal
Int. Vol/Ctnr: 0.21 m3
Liner Type: rigid
Liner Material: HDPE
Number Stored: 57
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	475.0	316.7	617.5
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	203.0	135.3	263.5
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	12.0	12.0	m3
End of 1993:	12.0	12.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	1.83E+00	Curies/m3
Pu240	4.19E-01	Curies/m3
Pu241	9.97E+00	Curies/m3
Am241	0.00E+00	Curies/m3

Footnotes

1. The inventory for this waste stream contains mixed residues (2.94 m3 in 1992 and 3.36 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

WASTE STREAM
MWIR ID
WIPP ID RF-T076
Local ID 044, 080, 092
MATRIX CODE 3119
SITE FINAL FORM IDC

STREAM NAME

DESCRIPTION

Waste Matrix Code Group: Solidified Inorganics

Site Matrix Description: This waste stream was previously named "Particulate-Sludge/TRU(2)." IDC Nos. 044, 050, 092, 099, 159, 289, 290, 332, 340, 422, and 423. This waste was generated from plutonium recovery operations in Building 771. The waste consists of low-purity oxide heel (IDC 289), incineration sludge (IDC 292), miscellaneous sludge (IDC 299), sludge from size reduction area (IDC 340), grit (IDC 372), soot (IDC 422), and soot heel (IDC 423). The waste is packaged in 55-gallon drums with multiple bag liners. Inventory data include residues in these IDCs. IDC 044 - AM and Misc. Oxide.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

RF-T076

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: metal
Int. Vol/Ctnr: 0.21 m3
Liner Type:
Liner Material:
Number Stored: 0
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Final waste form for these residues are included in other waste forms as REP output.

Footnotes

1. The inventory for this waste stream contains mixed residues (0.63 m3 in 1992 and 5.96 m3 in 1993). This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | **WASTE TYPE** MTRU | **HANDLING** CH | **GENERATOR SITE** RF

WASTE STREAM MWIR ID	RF-W008	**STREAM NAME**	Soil & Cleanup Debris/TRM
WIPP ID	RF-W008	**DESCRIPTION**	
Local ID	RF-374		
MATRIX CODE	5900		
SITE FINAL FORM IDC	374		
Waste Matrix Code Group	Heterogeneous		

Site Matrix Description: This waste stream is construction rubble generated during decontamination and decommissioning activities. The waste consists of blacktop/concrete/dirt/sand. The waste is generated from construction/demolition within the plutonium process buildings.
The waste is usually packed in 55-gal. drums with multiple bag liners, a fiberboard liner, and a rigid polyethylene liner. Also, the waste con be packaged in DOT 7A, Type A metal boxes which are lined with a fiberboard and PVC liner. This waste is identified by IDC 374. Inventory data include mixed residues in this IDC. IDC 374 - Construction rubble generated during decontamination and decommissioning operations. Metals are considered to be potentially present in the rubble from demolition and cleanup activities. Solvents are potentially present from the materials used during decontamination.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 121 | **TRUCON CODE** RF 121

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance	X		

00748

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **RF** | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W008

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE

Number Stored: 9
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	311.6	8.7	865.8
Cellulosics	12.0	12.0	12.0
Rubber	0.0	0.0	0.0
Plastics	12.0	12.0	12.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	64.9	9.6	865.8
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.9	1.9	m3
End of 1993:	1.9	1.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	6.06E-01	Curies/m3
Pu240	1.39E-01	Curies/m3
Pu241	3.30E+00	Curies/m3
Am241	0.00E+00	Curies/m3

TYPICAL EPA CODES APPLICABLE

D006A
D007A
D008A
F001
F002
F005A

Footnotes

1. The inventory for this waste stream contains mixed residues (0.21 m3 in 1992 and 0.21 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID	RF-W010	**STREAM NAME**	Aqueous Sludge/TRM
WIPP ID	RF-W010		
Local ID	RF-800, 803, 807	**DESCRIPTION**	Solidified process residues
MATRIX CODE	3150		
SITE FINAL FORM IDC	800,803,807		

Waste Matrix Code Group Solidified Inorganics

Site Matrix Description This waste stream consists of aqueous sludge from wastewater treatment mixed with 30% Portland cement. IDC No. 800, 803, 807. The waste is generated as a result of process waste water treatment in Building 374 and 774. Aqueous sludge is produced by vacuum filtration of precipitated solids from pretreated aqueous waste slurry. Entrapped solids are skimmed off the surface of the filter medium of the rotating drum as wet sludge. The precipitated solids are chiefly hydroxides with pH of 10-12. The final waste form is obtained by mixing the wet sludge with approximately 30% Portland cement. RFP has several drums of aqueous sludge that were returned by INEL. These old drums were packaged by alternating the layers of cement and wet sludge or by adding cement to the top and bottom of a drum containing wet sludge. This older waste is described by IDC's 001, 002, and 007.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 111 | **TRUCON CODE** RF 111

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste	X		
				Maintenance			

000750

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W010 CONTAINER: Drum | Type/Size: 55-gallon

Container Mat'l: metal | Int. Vol/Ctnr: 0.21 m3

Liner Type: rigid | Liner Material: HDPE

Number Stored: 684 | Number Projected: 396

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	395.6	44.2	767.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	400.5	44.3	767.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	64.8		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	143.4	143.4	m3
End of 1993:	143.6	143.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.9	0.9	m3/yr
1996:	0.9	0.9	m3/yr
1997:	0.9	0.9	m3/ry
1998-2002:	1.0	1.0	m3/yr
2003-2022:	3.8	3.8	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A
D008A
F001
F002
F005A
F005A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	5.16E-01	Curies/m3
Pu240	1.18E-01	Curies/m3
Pu241	2.81E+00	Curies/m3
Am241	2.03E+00	Curies/m3

Footnotes

1. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID	RF-W011	**STREAM NAME**	Metal/TRM
WIPP ID	RF-W011		
Local ID	*RF-480*	**DESCRIPTION**	*Metal debris*
MATRIX CODE	5112		
SITE FINAL FORM IDC	480		

Waste Matrix Code Group: Uncategorized Metal

Site Matrix Description: IDCs 480 and 481. This waste includes items such as gloveboxes and machinery, and empty containers. Items that are difficult to reduce to a size that would fit in a 55-gal. drum are placed in DOT 7A, Type A metal boxes. These drums are lined with a rigid polyethylene liner, fiberboard liner and several bag liners. The boxes are lined with a fiberboard and PVC liner. Inventory data include mixed residues in IDCs 480 and 481.

NO MIGRATION VARIANCE PETITION ASSIGNMENT: RF 117 | **TRUCON CODE**: RF 117

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		*Unknown*	
				From Treatment of Waste			
				Maintenance			

000752

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

RF-W011

CONTAINER:	metal box	Container Mat'l:	metal	Liner Type:	
Type/Size:	4x4x7	Int. Vol/Ctnr:	0 m3	Liner Material:	

Number Stored: 0
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	171.3	1.7	695.4
Aluminum-Based Metals/Alloys	18.6	0.0	238.9
Other Metals	16.5	0.0	67.0
Other Inorganic Materials	19.6	0.0	79.6
Cellulosics	5.5	0.0	22.3
Rubber	0.0	0.0	0.0
Plastics	10.1	0.0	41.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	187.1		
Packaging Material, Plastic	2.2		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	6.3	6.3	m3
End of 1993:	6.3	0.0	m3
1994:	19.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

TYPICAL EPA CODES APPLICABLE

D008C

F001

F002

Comments

Assume waste in metal boxes will be repackaged into SWBs with 1:2 ratio
Final waste form volumes are included in final waste form volumes for SWBs

Footnotes

1. The 1994 inventory refelcts an increase of 19.02 m3 which is due to the Waste Characterization Re-assessment effort. This volume of waste was re-characterized as TRU Mixed waste (previously considered non-mixed TRU). This inventory of waste was transferred from Waste Stream RF-T011.
2. The number of containers stored and number of containers projected is reported as 0 because these are not final packages. The waste reported on this sheet will be repackaged into SWB's .
3. The typical waste densities for this container were derived for the SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W011 | CONTAINER: Standard waste box | Type/Size: | Container Matl: metal | Int. Vol/Ctnr: 1.9 m3 | Liner Type: Bag/rigid | Liner Material: PVC/fiberboard | Number Stored: 10 | Number Projected: 12

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	171.3	1.7	695.4
Aluminum-Based Metals/Alloys	18.6	0.0	238.9
Other Metals	16.5	0.0	67.0
Other Inorganic Materials	19.6	0.0	79.6
Cellulosics	5.5	0.0	22.3
Rubber	0.0	0.0	0.0
Plastics	10.1	0.0	41.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	187.1		
Packaging Material, Plastic	2.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	11.4	19.0	m3
End of 1993:	11.4	19.0	m3
1994:	0.0	22.8	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008C

F001

F002

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Final waste form volumes reflect repackaging of metal boxes into SWBs with a 1:2 ratio
- End of 1992 - 2 metal boxes repacked to 4 SWBs
- End of 1993 - 2 metal boxes repacked to 4 SWBs
- 1994 - 6 metal boxes repacked to 12 SWBs

Footnotes

1. The number of containers stored (10) and the number of containers projected (12) includes waste that is presently stored in 4x4x7 metal boxes that will be repackaged into SWB's.
2. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

000754

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W011

CONTAINER:	Drum	Container Mat'l:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE/fiberboar

Number Stored: 231
Number Projected: 1464

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	171.3	1.7	695.4
Aluminum-Based Metals/Alloys	18.6	0.0	238.9
Other Metals	16.5	0.0	67.0
Other Inorganic Materials	19.6	0.0	79.6
Cellulosics	5.5	0.0	22.3
Rubber	0.0	0.0	0.0
Plastics	10.1	0.0	41.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	60.3	60.6	m3
End of 1993:	48.5	48.9	m3
1994:	7.1	7.1	m3/yr
1995:	16.0	16.0	m3/yr
1996:	12.5	12.5	m3/yr
1997:	2.7	2.7	m3/ry
1998-2002:	2.9	2.9	m3/yr
2003-2022:	12.7	12.7	m3/yr

TYPICAL EPA CODES APPLICABLE

D008C
F001
F002

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	2.03E+00	Curies/m3
Pu240	4.64E-01	Curies/m3
Pu241	1.10E+01	Curies/m3
Am241	1.84E+00	Curies/m3

Comments

Final waste form volume reflects inclusion of final form waste from treatment of PCB solid/TRM (RF-W001) of following amounts:
End of 1992 - .21m3
End of 1993 - .42m3

Footnotes

1. The inventory for this waste stream contains mixed residues (16.42 m3 in 1992 and 6.14 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID	RF-W012	**STREAM NAME**	Combustibles/TRM
WIPP ID	RF-W012		
Local ID	RF-831,832, 833	**DESCRIPTION**	Predominantly combustible debris
MATRIX CODE	5330		
SITE FINAL FORM IDC	831,832,822,83		
Waste Matrix Code Group	Heterogeneous		

Site Matrix Description: IDC No. 330, 336, 337, 831, 831, 833. The waste consists mainly of cloth and paper products from cleanup of gloveboxes and spills, involving hazardous solvents. The bulk of these wastes are packaged in 55-gallon drums with one rigid polyethylene liner and several bag liners. In addition the waste may be repackaged into DOT 7A, Type A metal boxes which are lined with a fiberboard and PVC liner. Inventory data include mixed residue within the same IDCs.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 116 | **TRUCON CODE** RF 116

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance	X		

000756

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W012

CONTAINER: metal box
Type/Size: 4x4x7
Container Matl: metal
Int. Vol/Ctnr: 0 m3
Liner Type:
Liner Material:
Number Stored: 0
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.1	0.0	7.2
Cellulosics	64.2	0.0	481.6
Rubber	6.1	0.0	481.6
Plastics	18.5	0.0	481.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	187.1		
Packaging Material, Plastic	2.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	15.9	0.0	m3
End of 1993:	15.9	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

TYPICAL EPA CODES APPLICABLE

F001
F002
F005A
F005A

Comments

Assume waste in metal boxes will be repackaged into SWB's with 1:2 ratio.
Final waste form volumes are included in final waste form volumes for SWB's.

Footnotes

1. The number of containers stored is reported as 0 because these are not final packages. The waste reported on this sheet will be repackaged into SWB's.
2. The typical waste densities for this container were derived for the SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF **WASTE TYPE** MTRU **HANDLING** CH **GENERATOR SITE** RF

RF-W012 **CONTAINER: Type/Size:** Standard waste box

Container Matl: metal **Int. Vol/Ctnr:** 1.9 m3

Liner Type: Bag **Liner Material:** PVC

Number Stored: 15 **Number Projected:** 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.1	0.0	7.2
Cellulosics	64.2	0.0	481.6
Rubber	6.1	0.0	481.6
Plastics	18.5	0.0	481.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	187.1		
Packaging Material, Plastic	2.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	9.5	28.5	m3
End of 1993:	9.5	28.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
	0.00E+00	Curies/m3

TYPICAL EPA CODES APPLICABLE

F001
F002
F005A
F005A

Comments

Final waste form volumes reflect repackaging of metal boxes into SWB's with a 1:2 ratio
End of 1992 - 5 metal boxes repacked into 10 SWB's
End of 1993 - 5 metal boxes repacked into 10 SWB's

Footnotes

1. The number of containers stored (15) includes waste that is presently stored in 4x4x7 metal boxes that will be repackaged into SWB's.
2. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

000758

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W012 CONTAINER: Drum | Type/Size: 55-gallon | Container Matl: metal | Int. Vol/Ctnr: 0.21 m3 | Liner Type: rigid | Liner Material: HDPE | Number Stored: 1130 | Number Projected: 2914

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.1	0.0	7.2
Cellulosics	64.2	0.0	481.6
Rubber	6.1	0.0	481.6
Plastics	18.5	0.0	481.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	267.9	267.9	m3
End of 1993:	237.3	237.3	m3
1994:	-10.4	-10.4	m3/yr
1995:	19.2	19.2	m3/yr
1996:	15.7	15.7	m3/yr
1997:	6.2	6.2	m3/ry
1998-2002:	6.3	6.3	m3/yr
2003-2022:	27.5	27.5	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	9.49E-01	Curies/m3
Pu240	2.17E-01	Curies/m3
Pu241	5.17E+00	Curies/m3
Am241	7.34E-01	Curies/m3

TYPICAL EPA CODES APPLICABLE

F001
F002
F005A
F005A

Comments

On site final form IDC, 822 is also submitted for inclusion in TRUCON.
New densities assume no supercompaction.

Footnotes

1. The inventory for this waste stream contains mixed residues (104.1 m3 in 1992 and 33.18 m3 in 1993; the decrease in inventory is due to repackaging efforts) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The 1994 inventory reflects a decrease of 19.32 m3 which is due to the Waste Characterization Re-assessment effort (8.9 m3 generated - 19.32 m3 transferred to non-mixed = -10.42 m3 represented for annual generation). This volume of waste was re-characterized as non-mixed TRU waste. This inventory of waste was transferred to Waste Stream RF-T002.
3. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

WASTE STREAM MWIR ID	RF-W013
WIPP ID	RF-W013
Local ID	RF-801
MATRIX CODE	3222
SITE FINAL FORM IDC	801
STREAM NAME	Solidified Organics/TRM
DESCRIPTION	Solidified Process Residues
Waste Matrix Code Group	Solidified Organics
Site Matrix Description	IDC. No. 801. This waste stream includes waste TRU organic fluids which are transferred to Building 774 for cementation from Buildings 707, 776, and 777. The liquids are mixed with gypsum cement within 55-gallon drums. The drum is lined with one or two bag liners with a rigid polyethylene liner. This waste stream includes cemented solids, and organic sludges/particulates. IDC 801 - Organic waste from liquid waste processing in Building 774. Mixed waste.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 112 **TRUCON CODE** RF 112

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste	X			
				Maintenance				

002700

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W013

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE

Number Stored: 530
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	521.6	199.1	728.3
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	467.5	178.5	652.8
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	64.8		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	111.3	111.3	m3
End of 1993:	111.3	111.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

F001

F002

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	4.70E-01	Curies/m3
Pu240	1.08E-01	Curies/m3
Pu241	2.56E+00	Curies/m3
Am241	2.65E-01	Curies/m3

Footnotes

1. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

1017

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

WASTE STREAM MWIR ID	RF-W026	**STREAM NAME**	Used Absorbents/TRM
WIPP ID	RF-W026		
Local ID	RF-375	**DESCRIPTION**	Adsorbed Organic Liquids
MATRIX CODE	3114		
SITE FINAL FORM IDC	375		
Waste Matrix Code Group	Inorganic Non-metal		

Site Matrix Description This waste stream was previously named "Spent Absorbent/TRU (Oil Dry)". This waste stream was not specifically identified in the Storage and Inventory Report prepared by RFP in fulfillment of FFCA requirements. This waste is the TRU fraction of the waste titled "Oil Dry/LLW Mixed" in the Inventory Report. Normally it is LLW, but occasionally some assays as TRU. This waste stream is IDC N.. 375 Absorbents, usually vermiculite materials, which are used in the absorption , or absorption of any liquids as needed. One of the most commonly used absorbents is Oil Dri(R). Spent absorbents are assumed to be radiologically contaminated. The waste is packaged in 55-gallon drums lined with two polyethylene bags.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 122 **TRUCON CODE** RF 122

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

00092

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W026 CONTAINER: Drum | Type/Size: 55-gallon | Container Matl: metal | Int. Vol/Ctnr: 0.21 m3 | Liner Type: rigid | Liner Material: HDPE | Number Stored: 1 | Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	182.3	182.3	182.3
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	8.3	8.3	8.3
Solidified, Organic matrix	8.3	8.3	8.3
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.2	m3
End of 1993:	0.2	0.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239		Curies/m3
Pu240		Curies/m3
Pu241		Curies/m3
Am241		Curies/m3

TYPICAL EPA CODES APPLICABLE

F001

Comments

Typical activity (curies/m3) for these radionuclides is not known.

Footnotes

1. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM

MWIR ID	RF-W028
WIPP ID	RF-W028
Local ID	RF-321
MATRIX CODE	7211
SITE FINAL FORM IDC	321
STREAM NAME	Lead/TRM
DESCRIPTION	Elemental Lead
Waste Matrix Code Group	Lead/Cadmium Metal Waste
Site Matrix Description	IDC No. 321 - this waste stream consists of lead waste that is generated from discarded shielding, usually in the form of sheets and bricks used extensively in the Perimeter Security Zone (PSZ) to protect personnel against radiation exposure during plutonium processing. This waste is packaged in 55-gallon drums lined with fiberboard liner and two polyethylene bag liners. Inventory data include mixed residues of the same IDC. IDC 321 - all lead items and items containing lead except IDCs 302, 339, 341, 444, and 448.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 117

TRUCON CODE RF 117

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000764

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W028

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE/fiberboar

Number Stored: 18
Number Projected: 38

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	592.2	16.0	1438.3
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3.8	3.8	m3
End of 1993:	3.8	3.8	m3
1994:	0.1	0.1	m3/yr
1995:	0.3	0.3	m3/yr
1996:	0.3	0.3	m3/yr
1997:	0.3	0.3	m3/ry
1998-2002:	0.3	0.3	m3/yr
2003-2022:	0.3	0.3	m3/yr

TYPICAL EPA CODES APPLICABLE

D008C

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	5.60E-01	Curies/m3
Pu240	1.28E-01	Curies/m3
Pu241	3.05E+00	Curies/m3
Am241	1.86E-01	Curies/m3

Footnotes

1. The inventory for this waste stream contains mixed residues (0 m3 in 1992 and 0.42 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID	RF-W029	**STREAM NAME**	Leaded Gloves/TRM
WIPP ID	RF-W029		
Local ID	RF-339	**DESCRIPTION**	Leaded Gloves/Aprons Debris
MATRIX CODE	5311		
SITE FINAL FORM IDC	339		
Waste Matrix Code Group	Lead/Cadmium Metal Waste		
Site Matrix Description	IDC No. 339. This waste stream consists of leaded rubber gloves which are used on gloveboxes to reduce radiation exposure to personnel. Gloves which are damaged, or do not meet safety inspection requirements are replaced with new gloves and discarded as waste. The gloves are packaged in 55-gallon drums lined with a rigid polyethylene liner and one bag liner. Inventory data include mixed residues in IDC 339. 339 - Leaded drybox gloves, not acid contaminated - See IDC 341 if the gloves are acid contaminated.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 123 | TRUCON CODE RF 123

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

392000

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

RF-W029

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: metal
Int. Vol/Ctnr: 0.21 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored: 103
Number Projected: 500

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	182.3	1.4	370.1
Cellulosics	5.4	1.2	10.1
Rubber	107.1	0.8	217.3
Plastics	16.3	0.0	30.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	20.8	20.8	m3
End of 1993:	21.6	21.6	m3
1994:	3.0	3.0	m3/yr
1995:	5.2	5.2	m3/yr
1996:	4.2	4.2	m3/yr
1997:	1.4	1.4	m3/ry
1998-2002:	1.4	1.4	m3/yr
2003-2022:	4.2	4.2	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	3.99E+00	Curies/m3
Pu240	9.13E-01	Curies/m3
Pu241	2.17E+01	Curies/m3
Am241	2.02E+00	Curies/m3

TYPICAL EPA CODES APPLICABLE

D008A

Comments

Other Inorganic material - Pb3 04 - 63% of glove weight
Rubber - 37% of glove weight

Footnotes

1. The inventory for this waste stream contains mixed residues (0.21 m3 in 1992 and 0.63 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM
MWIR ID RF-W032
WIPP ID RF-W032
Local ID RF-444

STREAM NAME Ground glass/TRM

DESCRIPTION uncategorized Inorganic particulates

MATRIX CODE 3119

SITE FINAL FORM IDC 444

Waste Matrix Code Group: Inorganic Non-metal

Site Matrix Description: IDC No. 444. This waste stream is crushed fluorescent lights with some leached glass. Glass waste consists of crushed fluorescent lamps which come from the fluorescent lights used throughout the plutonium and uramium processing areas, as well as ground leaded glass. Small amounts of leached glass may be mixed with the crushed fluorescent lamp waste. This glass waste is packaged in 55-gallon drums that are lined with one fiberboard liner and two polyethylene bags. IDC 444 - ground/leaded glass. Mixed waste.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 118

TRUCON CODE RF 118

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance	X		

000768

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **RF** | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W032 CONTAINER: metal box | Type/Size: 4x4x7

Container Mat'l: metal | Int. Vol/Ctnr: 0 m3

Liner Type: | Liner Material:

Number Stored: 0 | Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	137.5	77.7	215.5
Cellulosics	1.1	1.1	1.1
Rubber	1.1	1.1	1.1
Plastics	19.8	19.8	19.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	187.1		
Packaging Material, Plastic	2.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	3.2	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Assume waste in metal boxes will be repackaged into SWBs with 1:2 ratio.
Final waste form volumes are included in final waste form volumes for SWBs.

Footnotes

1. The 1994 inventory of 4'x4'x7' metal boxes reflects an increase of 3.17 m3 which is due to the Waste Characterization Re-assessment effort. This volume of waste was re-characterized as TRU Mixed waste (previously considered non-mixed TRU). This inventory of waste was transferred from Waste Stream RF-T003.
2. The typical waste densities for this container were derived for the SWB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

RF-W032 CONTAINER: Standard Waste Box
Type/Size:

Container Matl: metal
Int. Vol/Ctnr: 1.9 m3

Liner Type: Bag/rigid
Liner Material: PVC/fiberboard

Number Stored: 1
Number Projected: 2

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	137.5	77.7	215.5
Cellulosics	1.1	1.1	1.1
Rubber	1.1	1.1	1.1
Plastics	19.8	19.8	19.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	187.1		
Packaging Material, Plastic	2.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.9	1.9	m3
End of 1993:	1.9	1.9	m3
1994:	0.0	3.8	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Final waste form volumes reflect repackaging of metal boxes into SWBs with 1:2 ratio
1994 - 1 metal box repackaged into 2 SWBs.

Footnotes

1. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.
2. The number of containers projected (2) includes waste that is presently stored in 4x4x7 metal boxes that will be repackaged into SWB's.

0410170

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | **WASTE TYPE** MTRU | **HANDLING** CH | **GENERATOR SITE** RF

RF-W032

CONTAINER:	Drum	**Container Matl:**	metal	**Liner Type:**	rigid	**Number Stored:**	4
Type/Size:	55-gallon	**Int. Vol/Ctnr:**	0.21 m3	**Liner Material:**	HDPE/fiberboar	**Number Projected:**	38

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	137.5	77.7	215.5
Cellulosics	1.1	1.1	1.1
Rubber	1.1	1.1	1.1
Plastics	19.8	19.8	19.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.2	m3
End of 1993:	0.8	0.8	m3
1994:	0.1	0.1	m3/yr
1995:	0.3	0.3	m3/yr
1996:	0.3	0.3	m3/yr
1997:	0.3	0.3	m3/ry
1998-2002:	0.3	0.3	m3/yr
2003-2022:	0.3	0.3	m3/yr

TYPICAL EPA CODES APPLICABLE

D008A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	2.45E-01	Curies/m3
Pu240	5.61E-02	Curies/m3
Pu241	1.33E+00	Curies/m3

Comments

Assumes no immobilization required which is supported by sample analysis.

Footnotes

1. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

1400

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM MWIR ID	RF-W036	**STREAM NAME**	Firebrick, pulverized or fines/TRM
WIPP ID	RF-W036		
Local ID	RF-377	**DESCRIPTION**	uncateforized inorganic particulates
MATRIX CODE	3119		
SITE FINAL FORM IDC	377		
Waste Matrix Code Group	Heterogeneous		

Site Matrix Description This waste stream was previously named "Firebrick - Pulverized or Fines." IDC No. 377 and 378. This waste is generated from replacement of fire brick in the plutonium recovery incinerator in Building 771. The fire brick must be replaced periodically because of the plutonium buildup. The fire brick is pulverized to facilitate plutonium recovery. Material which assays below the economic discard limit is discarded as pulverized fire brick waste. The waste is packaged in 55-gallon drums lined with a rigid polyethylene liner. Inventory data include mixed residues in the same IDCs. IDC 377 - Waste from IDC 371 which is smaller than one inch diameter and larger than 1/4 inch diameter. IDC 378 - Particulate firebrick residue from recovery or particulate firebrick waste for discard. This IDC must be processed into IDC 806 (RF-M01).

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 122 **TRUCON CODE** RF 122

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000772

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W036

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE/fiberboar

Number Stored: 11
Number Projected: 42

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	104.4	44.5	263.0
Cellulosics	28.9	14.5	57.7
Rubber	0.0	0.0	0.0
Plastics	19.2	9.6	38.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.8	0.2	m3
End of 1993:	2.9	2.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.6	0.4	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	5.24E+00	Curies/m3
Pu240	1.20E+00	Curies/m3
Pu241	2.85E+01	Curies/m3
Am241	0.00E+00	Curies/m3

TYPICAL EPA CODES APPLICABLE

D004A
D006A
D007A
D008A
F001
F002
F002
F005A

Footnotes

1. The inventory for this waste stream contains mixed residues (10.25 m3 in 1992 and 12.88 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream

000773

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

WASTE STREAM MWIR ID	RF-W037	**STREAM NAME**	heavy metal (non-SS)/TRU
WIPP ID	RF-W037	**DESCRIPTION**	uncategorized metal debris
Local ID	RF-320		
MATRIX CODE	5190		
SITE FINAL FORM IDC	320		
Waste Matrix Code Group	Uncategorized Metal		

Site Matrix Description: IDC No. 320 Heavy (non-SS) metal waste is generated at various locations throughout the RFP. Heavy scrap metal is defined at RFP as metal elements above Cu on the periodic chart. In 1987, IDC 321 was created specifically for lead. Prior to this, lead was not segregated from IDC 320. Typically, these scrap metals consist of crucibles, funnels, rods and fixturing from several processes and production operations. Tantalum, tungsten and platinum are examples of scrap metals at the RFP. Inventory data include mixed residues in IDC 320. IDC 320 - scrap metals which are heavier than iron and steel. Metal above Cu on the periodic table. Mainly used tantalum curcibles.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 117 **TRUCON CODE** RF 117

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance	X		

000774

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W037

CONTAINER:	drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE/fiberboar

Number Stored: 22
Number Projected: 96

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	57.8	0.0	317.3
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	134.8	44.5	1057.7
Other Inorganic Materials	13.3	0.0	19.2
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	5.5	5.5	m3
End of 1993:	4.6	4.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	1.0	1.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008C

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	2.09E+01	Curies/m3
Pu240	4.79E+00	Curies/m3
Pu241	1.14E+02	Curies/m3
Am241	2.59E+00	Curies/m3

Footnotes

1. The inventory for this waste stream contains mixed residues (0 m3 in 1992 and 10.08 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | **WASTE TYPE** MTRU | **HANDLING** CH | **GENERATOR SITE** RF

WASTE STREAM MWIR ID	RF-W038	**STREAM NAME**	Solidified Lab Waste/TRM
WIPP ID	RF-W038		
Local ID	RF-802	**DESCRIPTION**	Solidified Process Residues
MATRIX CODE	3121		
SITE FINAL FORM IDC	802		
Waste Matrix Code Group	Solidified Inorganics		

Site Matrix Description IDC No. 802. This waste stream is liquid waste solidified with Portland Cement. This waste consists of waste liquids from the analytical labs, research and development laboratories, and maintenance shops which are packaged and sent to Building 774 for immobilization with Portland cement and absorbent cement. These are wastes which are incompatible with the process collection system and the liquid waste treatment plant. Acidic wastes are
neutralized before immobilization. Immobilization is done in 55-gallon drums. Approximately 21 gallons of waste are added to each drum prior to storage. This waste steam is newly identified since the Storage and Inventory Report.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 113 | **TRUCON CODE** RF 113

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste	X		
				Maintenance			

342003

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **RF** | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W038

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE

Number Stored: 7
Number Projected: 100

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	935.0	311.7	1122.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	333.0	238.0	476.2
Solidified, Organic matrix	0.0	0.0	567.3
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	64.8		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.3	1.3	m3
End of 1993:	1.5	1.5	m3
1994:	4.7	4.7	m3/yr
1995:	9.4	9.4	m3/yr
1996:	6.9	6.9	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D007A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	1.73E-01	Curies/m3
Pu240	3.97E-02	Curies/m3
Pu241	9.45E-01	Curies/m3
Am241	1.23E+00	Curies/m3

Footnotes

1. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

WASTE STREAM MWIR ID	RF-W040	STREAM NAME	incinerator ash/TRM
WIPP ID	RF-W040		
Local ID	not reported	DESCRIPTION	Ash. Final waste form of this waste is solidified process solids/TRM
MATRIX CODE	3111		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Solidified Inorganics		

Site Matrix Description: IDCs 419, 420, 421, 425 and 428. This waste stream was previously named "fluidized bed incinerator ash (TRU)-mixed." Ash is generated from operation of a fluidized bed incinerator in Building 776 or an incinerator in Building 771. The incinerator was used to burn office trash, combustible waste generated in process areas, combustible oils from refrigeration units, diesel fuel, and crank case oils. The oil had been accumulated as a low level mixed waste. FBI ash was packaged in 55-gallon drums lined with a rigid polyethylene liner and one bag liner. It is a portion of the waste stream entitled "fluidized bed incinerator ash/LLW mixed" in the inventory report. The ash normally assays as LLW but this portion was found to be TRU. Inventory data include mixed residues of the same IDC.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

0007773

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W040

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE

Number Stored: 8
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	68.3
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	489.0	376.2	635.7
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	208.9	160.7	271.6
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.7	0.0	m3
End of 1993:	1.7	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	7.49E+00	Curies/m3
Pu240	1.72E+00	Curies/m3
Pu241	4.08E+01	Curies/m3

TYPICAL EPA CODES APPLICABLE

D004A
D005A
D006A
D007A
D008A
D009A
D010A
D011A
F001
F002
F005A

Comments

1. This waste stream must be immobilized to convert to final waste form. A volume expansion of 2.11 occurs for processing of this TRUM waste to final form.

Footnotes

1. The inventory for this waste stream contains mixed residues (232.61 m3 in 1992 and 233.77 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. Final waste form reflects TRU waste inventories of incinerator ash being processed (with a volume expansion of 2.11). The final waste form volumes for this waste stream are in Waste Stream RF-M01.
3. The number of containers stored is for the year 1993. The number of

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM MWIR ID RF-W041

WIPP ID RF-W041

Local ID RF-341

MATRIX CODE 5311

SITE FINAL FORM IDC 339

STREAM NAME Leaded Gloves-Acid Contaminated/TRM

DESCRIPTION Leaded Gloves/Aprons Debris

Waste Matrix Code Group Lead/Cadmium Metal Waste

Site Matrix Description IDC No. 341. This waste stream consists of leaded rubber gloves used in the glovebox system for plutonium recovery operations in Buildings 771 and 371. These gloves are contaminated with nitric acid and other acids when replaced and discarded as waste. The gloves are packaged in 55-gallon drums lined with a rigid polyethylene liner and a bag liner. Inventory data include mixed residues in IDC 341. Leaded gloves as waste are currently characterized by process knowledge and sample analysis using the EP Toxicity Test. EP toxicity results of two new 30 mil glovebox type gloves (Lab # M85-2833) were below established levels for lead (D008) per 40 CFR 261.24, Table I. Leaded gloves discarded as waste have not been sampled due to the lack of capabilities to perform sample analysis on TRMs at RFP.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000780

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W041

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE

Number Stored: 126
Number Projected: 55

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	193.2	1.1	312.9
Cellulosics	5.4	1.2	10.1
Rubber	113.5	0.6	183.8
Plastics	16.3	3.6	30.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	26.3	26.3	m3
End of 1993:	26.5	26.5	m3
1994:	0.9	0.9	m3/yr
1995:	1.8	1.8	m3/yr
1996:	1.4	1.4	m3/yr
1997:	0.3	0.3	m3/ry
1998-2002:	0.3	0.3	m3/yr
2003-2022:	0.3	0.3	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	5.34E+00	Curies/m3
Pu240	1.22E+00	Curies/m3
Pu241	2.91E+01	Curies/m3
Am241	7.94E+00	Curies/m3

TYPICAL EPA CODES APPLICABLE

D008A

Comments

Must be washed to convert to IDC 339
Pb3 04 - 63% of glove weight
Rubber - 27% of glove weight

Footnotes

1. The inventory for this waste stream contains mixed residues (1.46 m3 in 1992 and 1.68 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID	RF-W052	**STREAM NAME**	Glass/TRM
WIPP ID	RF-W052		
Local ID	440,441,442,856	**DESCRIPTION**	Glass debris
MATRIX CODE	5122		
SITE FINAL FORM IDC	440, 442*		
Waste Matrix Code Group	Inorganic Non-metal		

Site Matrix Description: This waste stream is glass from D&D, labs, etc. IDC 440, 441, 442, 856. This waste stream is made up of glass from analytical labs, recovery processes, ceramics, and glovebox windows. This waste stream was previously named "glass." Inventory data include mixed residues in the same IDCs. This waste form has been characterized by TCLP analytical data and process knowledge. Ground glass is characterized by process knowledged and limited analytical data.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 118 | **TRUCON CODE** RF 118

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance	X		

00782

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

RF-W052 CONTAINER: Standard waste box
Type/Size:

Container Matl: metal
Int. Vol/Ctnr: 1.9 m3

Liner Type: Bag/rigid
Liner Material: PVC/fiberboard

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	244.3	20.7	466.5
Cellulosics	1.1	0.0	1.1
Rubber	1.1	0.0	1.1
Plastics	19.8	0.0	19.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	187.1		
Packaging Material, Plastic	2.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.9	1.9	m3
End of 1993:	1.9	1.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D005A
D008A
F001
F002

TYPICAL ISOTOPIC COMPOSITION

Nuclide Activity

Footnotes

1. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

C8700

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W052

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: metal
Int. Vol/Ctnr: 0.21 m3
Liner Type: rigid
Liner Material: HDPE/fiberboar
Number Stored: 56
Number Projected: 1316

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	244.3	20.7	466.5
Cellulosics	1.1	0.0	1.1
Rubber	1.1	0.0	1.1
Plastics	19.8	0.0	19.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.5	1.5	m3
End of 1993:	11.8	11.8	m3
1994:	5.9	5.9	m3/yr
1995:	11.8	11.8	m3/yr
1996:	11.1	11.1	m3/yr
1997:	9.0	9.0	m3/ry
1998-2002:	9.0	9.0	m3/yr
2003-2022:	9.7	9.7	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	1.28E+00	Curies/m3
Pu240	2.83E-01	Curies/m3
Pu241	6.75E+00	Curies/m3

TYPICAL EPA CODES APPLICABLE

D005A
D008A
F001
F002

Comments

IDC 856 must be authorized for TRUPACT-II.

Footnotes

1. The inventory for this waste stream contains mixed residues (8.74 m3 in 1992 and 8.40 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID	RF-W056	**STREAM NAME**	Mg Oxide Crucibles/TRM
WIPP ID	RF-W056		
Local ID	RF-370,368,655	**DESCRIPTION**	Ceramic/Brick Debris
MATRIX CODE	5123		
SITE FINAL FORM IDC	370, 368		

Waste Matrix Code Group: Inorganic Non-metal

Site Matrix Description: IDCs 370, 368 and 655. This waste stream includes any type or size of ceramic crucibles or liners including LECO crucibles. This waste consists of magnesium oxide crucible, magnesium oxide crucible fragments with reactive salts of calcium, magnesium, sodium, and/or potassium adhering to the surface and containing plutonium residue. This waste stream was generated during plutonium recovery using pyrochemical and electro-chemical processing. Waste is placed in 4-liter poly bottles and double plastic bagged or placed in 1 gallon or 1 quart paint cans, then placed into 55-gallon drums. Inventory data includes mixed residues in IDC 368.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 118 **TRUCON CODE** RF 118

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

00785

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W056

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE

Number Stored: 6
Number Projected: 15

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	11.9	0.0	23.8
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	370.2	111.0	828.4
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	26.9	0.0	53.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.6	0.6	m3
End of 1993:	1.3	1.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.2	0.2	m3/yr

TYPICAL EPA CODES APPLICABLE

D003D

D006A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	5.50E+00	Curies/m3
Pu240	1.26E+00	Curies/m3
Pu241	3.30E+01	Curies/m3
Am241	0.00E+00	Curies/m3

Footnotes

1. The inventory for this waste stream contains mixed residues (45.21 m3 in 1992 and 46.31 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. Final waste form reflects TRU waste inventories being processed. The final waste form volumes for this waste stream are in Waste Stream RF-M001.
3. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

98109

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID	RF-W057	**STREAM NAME**	Insulation/TRM
WIPP ID	RF-W057		
Local ID	RF-438	**DESCRIPTION**	Uncategorized inorganic non-metal debris
MATRIX CODE	5129		
SITE FINAL FORM IDC	438		
Waste Matrix Code Group	Inorganic Non-metal		

Site Matrix Description: IDC 438 - This waste stream is contaminated insulation. The insulation is generated from construction and demolition onsite. This waste was characterized using process knowledge for manifesting purposes is 1987 and 1989 to determine if any reportable quantities per 49 CFR 172 were present. These are spent solvents from degreasing of plutonium or other metals. No laboratory analyses of these wastes for RCRA hazardous constituents have been conducted.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 122 | **TRUCON CODE** RF 122

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance	X		

000787

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

RF-W057 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: metal
Int. Vol/Ctnr: 0.21 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored: 3
Number Projected: 78

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	84.7	2.2	362.8
Cellulosics	4.8	0.0	9.6
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.6	0.6	m3
End of 1993:	0.6	0.6	m3
1994:	0.1	0.1	m3/yr
1995:	0.3	0.3	m3/yr
1996:	0.3	0.3	m3/yr
1997:	0.3	0.3	m3/ry
1998-2002:	0.3	0.3	m3/yr
2003-2022:	0.7	0.7	m3/yr

TYPICAL EPA CODES APPLICABLE

F001

F002

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	2.73E+00	Curies/m3
Pu240	6.24E-01	Curies/m3
Pu241	1.48E+01	Curies/m3

Footnotes

1. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

3008783

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID	RF-W058	**STREAM NAME**	Misc. Pu Recovery Byproducts/TRM
WIPP ID	RF-W058		
Local ID	RF-411	**DESCRIPTION**	Chloride salts
MATRIX CODE	3141		
SITE FINAL FORM IDC	411		
Waste Matrix Code Group	Salt Waste		

Site Matrix Description: IDCs 365, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 418, 427, 429, 433, 434, 435, 473, and 654. This waste is generated during plutonium recovery operations such as direct oxide reduction molten salt extraction, electrorefining, and salt scrub. Its composition includes mixed salts, a probable presence of magnesium, sodium and potassium metals (reactivity characteristic D003) and chromium (D007). Inventory data include mixed residues in the IDCs. This waste stream includes inorganic sludges/particulates, and reactive metals. This waste consists of reactive molten and electrorefining (ER) salt residues from plutonium purification and direct oxide reduction.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 124 | **TRUCON CODE** RF 124

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000739

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W058 CONTAINER: Drum Type/Size: 55-gallon Container Matl: metal Int. Vol/Ctnr: 0.21 m3 Liner Type: rigid Liner Material: HDPE/fiberboar Number Stored: 45 Number Projected: 229

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	23.8	4.8	28.6
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	261.9	124.3	719.1
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	9.7	9.7	m3
End of 1993:	9.4	9.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	2.4	2.4	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B

D003D

D007A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	3.73E+01	Curies/m3
Pu240	8.55E+00	Curies/m3
Pu241	2.03E+02	Curies/m3
Am241	4.23E-01	Curies/m3

Footnotes

1. The inventory for this waste stream contains mixed residues (146.55 m3 in 1992 and 138.76 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID	RF-W059	**STREAM NAME**	Sand, Slag, and Crucible/TRM
WIPP ID	RF-W059		
Local ID	391	**DESCRIPTION**	Uncategorized Inorganic Particulates. Final waste form of this waste is Solidified Process Solids/TRM.
MATRIX CODE	3119		
SITE FINAL FORM IDC	391		
Waste Matrix Code Group	Solidified Inorganics		

Site Matrix Description: This waste includes unpulverized slag (IDC 387, 390, 395, 396), unpulverized sand and crucible (IDC 391), unpulverized sand, slag and crucible (IDC 392), sand slag and crucible heel (IDC 393), sand from button breakout (IDC 394), pulverized sand slag and crucible (IDC 398), and pulverized slag and curcible (IDC 399). This waste is generated during the reduction of plutonium tetrafluoride to plutonium metal. Its composition includes magnesium oxide sand, crucible, calcium metal and stainless steel (contains chromium). The calcium metal gives the reactivity characteristic of D003; the chromium gives the D007. Inventory data include mixed residues in these IDCs.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000791

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W059

CONTAINER:	Drum	Container Mat'l:	metal	Liner Type:	rigid	Number Stored:	0
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	HDPE	Number Projected:	0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	68.3
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	489.0	376.2	635.7
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	208.9	160.7	271.6
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	12.4	0.0	m3
End of 1993:	12.4	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	7.5	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D003D

D007A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	3.50E+01	Curies/m3
Pu240	8.01E+00	Curies/m3
Pu241	1.91E+02	Curies/m3
Am241	4.76E+00	Curies/m3

Footnotes

1. The inventory for this waste stream contains mixed residues (42.11 m3 in 1992 and 31.51 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. Final waste form reflects TRU waste inventories being processed (with a volume increase of 1:2.16). The final waste form volumes for this waste stream are in Waste Stream RF-M001.
3. The typical waste densities are for the final waste for RF-M001.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM

MWIR ID	RF-W060
WIPP ID	RF-W060
Local ID	RF-303, 312
MATRIX CODE	3119
SITE FINAL FORM IDC	303, 312
STREAM NAME	Coarse Graphite/TRM
DESCRIPTION	Graphite debris
Waste Matrix Code Group	Graphite
Site Matrix Description	This waste form includes scarfed graphite chunks (IDC 303) and coarse graphite (IDC 312). This waste is a result of broken graphite molds from the classified weapons shape casting process. Solid. The cadmium is present as contaminated salt residues on the graphite.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 115

TRUCON CODE RF 115

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000793

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

RF-W060 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: metal
Int. Vol/Ctnr: 0.21 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored: 2
Number Projected: 176

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	17.3
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	312.6	51.8	386.6
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.4	m3
End of 1993:	0.4	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	1.8	1.8	m3/yr

TYPICAL EPA CODES APPLICABLE

D006A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	1.91E+01	Curies/m3
Pu240	4.37E+00	Curies/m3
Pu241	1.04E+02	Curies/m3
Am241	0.00E+00	Curies/m3

Footnotes

1. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

1402731

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID	RF-W063	**STREAM NAME**	miscellaneous liquids/TRM
WIPP ID	RF-W063		
Local ID	070, 400, 401	**DESCRIPTION**	uncategorized wastewaters
MATRIX CODE	1190		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Solidified Inorganics		
Site Matrix Description	IDC No. 070, 400, 401, 500, 503, 508, 527, and 541. As result of the shutdown of plutonium operations at RFP in November, 1989, several hundred plastic bottles and several tanks of process liquids remained in storage in Buildings 371, 559, 771, and 779. These liquids are included in the list of mixed residues. Basis for the five-year projected generation is an estimate of the past three years generation history.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000795

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W063

CONTAINER: Drum
Type/Size: 55-gallon
Container Mat'l: metal
Int. Vol/Ctnr: 0.208 m3
Liner Type: rigid
Liner Material: HDPE
Number Stored: 0
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002B

D007A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Final waste form volume included in other waste forms.
No isotopic data available.

Footnotes

1. The inventory for this waste stream contains mixed residues (14.5 m3 in 1992 and 5.02 m3 in 1993). This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

WASTE STREAM MWIR ID	RF-W065	**STREAM NAME**	Calcium Metal/TRM
WIPP ID	RF-W065		
Local ID	RF-333	**DESCRIPTION**	Uncategorized reactive metals
MATRIX CODE	6290		
SITE FINAL FORM IDC			

Waste Matrix Code Group: Solidified Inorganics

Site Matrix Description: IDC 333. This material is elemental calcium used in plutonium reduction operations. Calcium metal pellets are mixed with plutonium tetrafluoride during the reduction process as a pyrotechnic initiator. It exhibits the characteristics of a RCRA reactive waste. 333 - Calcium Metal.

NO MIGRATION VARIANCE PETITION ASSIGNMENT:

TRUCON CODE:

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000797

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W065

CONTAINER:	Drum	Container Matl:	Metal	Liner Type:	Rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	HDPE

Number Stored: 0
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D003D

TYPICAL ISOTOPIC COMPOSITION

Nuclide | Activity

Comments

Volume change from 1992 to 1993 residues due to repackaging.
Final waste form volume included in other waste forms.
Isotopic data not available.

Footnotes

1. The inventory for this waste stream contains mixed residues (0.21 m3 in 1992 and .002 m3 in 1993). This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

WASTE STREAM MWIR ID RF-W066
WIPP ID RF-W066
Local ID RF-490

STREAM NAME Filters & media/TRM

MATRIX CODE 5410

SITE FINAL FORM IDC 335, 342*

DESCRIPTION Composite filters

Waste Matrix Code Group: Filter

Site Matrix Description: This waste stream was previously named "Filter Waste/TRU." IDC No. 328, 331, 335, 342, 376, 490, 491, 492. Filter waste is generated from process operations throughout the plant site. This waste consists of Ful-flo filters from the Building 771 incinerator (IDC 328), ful-flo filters from non-incineration operations (IDC 331), absolute glovebox filters from non-acid contaminated operations (IDC 335), acid contaminated absolute glovebox filters (IDC 342), acid contaminated HEPA filters (IDC 492), non-acid contaminated HEPA filters (IDC 492), plenum prefilters (IDC 491), filter media (IDC 338), and processed filter media (IDC 376). Processed filter media is material which has been treated using Portland cement to absorb moisture and neutralize acid contamination. Filter waste is packaged in 55-gallon drums and metal standard waste boxes. Inventory data include mixed residues within the same IDCs.

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 119

TRUCON CODE RF 119

FINAL WASTE FORM DESCRIPTORS:

- [X] Defense TRU Waste
- [ ] Non-Defense TRU Waste
- [ ] Commercial TRU Waste
- [ ] Unknown

- [X] Mixed TRU
- [ ] Non-Mixed TRU
- [ ] Suspect Mixed TRU
- [ ] Unknown

- [ ] Rsearch and Devel. Waste
- [X] Operations Waste
- [ ] Residues
- [ ] Decon and Decommissioning
- [ ] Environmental Restoration
- [ ] From Treatment of Waste
- [ ] Maintenance

TSCA
- [ ] Asbestos
- [ ] PCBs
- [ ] Other
- [X] N/A
- [ ] Unknown

000792

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W066

CONTAINER: metal box | Container Mat'l: metal | Liner Type: | Number Stored: 0

Type/Size: 4x4x7 | Int. Vol/Ctnr: 0 m3 | Liner Material: | Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	595.3
Aluminum-Based Metals/Alloys	42.1	0.0	440.7
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	15.0	0.0	154.8
Cellulosics	104.8	0.0	496.1
Rubber	1.1	0.0	11.3
Plastics	0.0	0.0	595.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	187.1		
Packaging Material, Plastic	2.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	3.2	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

TYPICAL EPA CODES APPLICABLE

D001C
D002B
D003E
D004A
D006A
D007A
D008A
D009X
D010A
D011A
F001
F002
F005A

Comments

Assume waste in metal boxes will be repackaged into SWBs with 1:2 ratio.
Final waste form volumes are included in final waste form volumes for SWBs.

Footnotes

1. The 1994 inventory reflects an increase of 3.17 m3 which is due to the Waste Characterization Re-assessment effort. This volume of waste was re-characterized as TRU mixed waste. This inventory of waste was transferred from Waste Stream RF-T066.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **RF** WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

RF-W066 CONTAINER Type/Size: Standard waste box

Container Matl: metal
Int. Vol/Cntr: 1.9 m3

Liner Type: Bag/rigid
Liner Material: PVC/fiberboard

Number Stored: 1
Number Projected: 2

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	595.3
Aluminum-Based Metals/Alloys	42.1	0.0	440.7
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	15.0	0.0	154.8
Cellulosics	104.8	0.0	496.1
Rubber	1.1	0.0	11.3
Plastics	0.0	0.0	595.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	187.1		
Packaging Material, Plastic	2.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.9	1.9	m3
End of 1993:	1.9	1.9	m3
1994:	0.0	3.8	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D001C
D002B
D003E
D004A
D006A
D007A
D008A
D009X
D010A
D011A
F001
F002
F005A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Footnotes

1. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.
2. The number of containers projected (2) includes waste that is presently stored in 4x4x7 metal boxes that will be repackaged into SWB's.

000801

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W066 CONTAINER: Drum | Type/Size: 55-gallon | Container Matl: metal | Int. Vol/Ctnr: 0.21 m3 | Liner Type: rigid | Liner Material: HDPE/fiberboar | Number Stored: 200 | Number Projected: 2460

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	23.9	0.0	440.7
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	8.3	0.0	154.8
Cellulosics	30.0	0.0	496.1
Rubber	1.3	0.0	11.3
Plastics	7.8	0.0	595.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	48.3	42.8	m3
End of 1993:	47.7	42.0	m3
1994:	2.5	1.8	m3/yr
1995:	5.1	3.6	m3/yr
1996:	3.9	2.8	m3/yr
1997:	0.6	0.4	m3/ry
1998-2002:	0.6	0.4	m3/yr
2003-2022:	35.1	25.3	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	3.27E+00	Curies/m3
Pu240	7.49E-01	Curies/m3
Pu241	1.78E+01	Curies/m3
Am241	6.18E-02	Curies/m3

TYPICAL EPA CODES APPLICABLE

D001C
D002B
D003E
D004A
D006A
D007A
D008A
D009X
D010A
D011A
F001
F002
F005A

Footnotes

1. The inventory for this waste stream contains mixed residues (78.72 m3 in 1992 and 54.40 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The drum final waste form reflects TRU waste inventories of IDCs 328 and 331 being processed (with a volume expansion of 2.16). Final waste form volumes for these IDCs are in Waste Stream RF-W067.
3. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

1080?

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

WASTE STREAM	MWIR ID	RF-W067	
	WIPP ID	RF-W067	
	Local ID	RF-376	
MATRIX CODE		5410	
SITE FINAL FORM IDC		376	

STREAM NAME: Cemented filters/TRM

DESCRIPTION: Composite filters

Waste Matrix Code Group: Filter

Site Matrix Description: This waste stream was previously named "Filter Waste/TRU." IDC NO. 338 and 376. Filter waste is generated from process operations throughout the plant site. Processed filter media, DC 376, is material which has been treated using Portland cement to absorb moisture and neutralize acid contamination. Filter waste is packaged in 55 gallon drums and metal standard waste boxes. Inventory data include mixed residues within the same IDCs because they are regulated as mixed waste. Hazardous constitutents originate in liquid and gaseous effluents from processing operations.

NO MIGRATION VARIANCE PETITION ASSIGNMENT: RF 119

TRUCON CODE: RF 119

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste	X			
				Maintenance				

000803

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

RF-W067

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE

Number Stored: 43
Number Projected: 2066

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	4.8	0.0	24.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	113.3	26.9	342.4
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	14.4	0.0	38.5
Solidified, Inorganic matrix	141.5	33.6	427.6
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	9.0	20.8	m3
End of 1993:	9.0	21.3	m3
1994:	0.0	1.5	m3/yr
1995:	0.0	3.1	m3/yr
1996:	0.0	2.3	m3/yr
1997:	0.0	0.3	m3/ry
1998-2002:	0.0	0.3	m3/yr
2003-2022:	0.0	21.2	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	6.61E+00	Curies/m3
Pu240	1.51E+00	Curies/m3
Pu241	3.60E+01	Curies/m3
Am241	0.00E+00	Curies/m3

TYPICAL EPA CODES APPLICABLE

D001C
D002B
D003E
D005A
D006A
D007A
D008A
D009X
F001
F002
F003

Footnotes

1. The inventory for this waste stream contains mixed residues (1.25 m3 in 1992 and 6.93 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. The final waste form volumes include volumes from treating TRU waste IDCs 328 and 331 from Waste Stream RF-W066.
3. The number of containers stored is for the year 1993. The number of containers projected is for the years 1994 - 2022.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU **HANDLING** CH **GENERATOR SITE** RF

WASTE STREAM

MWIR ID	RF-W068
WIPP ID	RF-W068
Local ID	292
MATRIX CODE	3129
SITE FINAL FORM IDC	

STREAM NAME Particulate Sludge/TRM

DESCRIPTION Uncategorized Inorganic Sludges. Final waste form of this waste is solidified process solids/TRM.

Waste Matrix Code Group Solidified Inorganics

Site Matrix Description This waste stream was previously named "Particulate-Sludge/TRU Mixed (2)." IDC No.s 292, 299, 372, and 823. This waste was generated from plutonium recovery operations in Building 771. The waste consists of incineration sludge (IDC 292), miscellaneous sludge (IDC 299), grit (IDC 372), and cemented miscellaneous sludge (IDC 823). Spent ion exchange resin waste is not included in this data. The waste is packaged in 55-gallon drums with multiple bag liners. Inventory data include mixed residues in these IDCs. This waste consists of a variety of organically contaminated sludges with particulate fines of heavy metals which are TRU contaminated.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste	X		
				Maintenance			

008069

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

RF-W068

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: metal
Int. Vol/Ctnr: 0.21 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored: 0
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	68.3
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	489.0	376.2	635.7
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	208.9	160.7	271.6
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	23.1	0.0	m3
End of 1993:	18.5	0.0	m3
1994:	1.5	0.0	m3/yr
1995:	3.4	0.0	m3/yr
1996:	2.7	0.0	m3/yr
1997:	1.0	0.0	m3/ry
1998-2002:	1.1	0.0	m3/yr
2003-2022:	2.5	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D001C
D006A
D007A
D008A
F001
F002
F005A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	5.08E+00	Curies/m3
Pu240	1.16E+00	Curies/m3
Pu241	2.77E+01	Curies/m3
Am241	0.00E+00	Curies/m3

Footnotes

1. The inventory for this waste stream contains mixed residues (2.93 m3 in 1992 and 2.14 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID	RF-W069	
WIPP ID	RF-W069	
Local ID	430, 431, 809	
MATRIX CODE	3212	
SITE FINAL FORM IDC	809	

STREAM NAME Organic Resins/TRM

DESCRIPTION Organic Resins

Waste Matrix Code Group Solidified Organics

Site Matrix Description *This waste stream was previously named "Particulate-Sludge/TRU Mixed (2)." IDC No. 430 and 431. This waste was generated from plutonium* recovery operations in Building 771. It consists of unleached resin (IDC 430) and leached resin (IDC 431). The particulate and sludge (TRU mixed) was (discussed in the National Report on Prohibited Wastes and Treatment Options and in Treatment Report No. 1) are unleached ion exchange resin (IDC 430) and leached resin (IDC 431). The waste is packaged in 55-gallon drums with multiple bag liners. Inventory data includes mixed residues in these IDCs. Final waste form for this waste stream is cemented resin (IDC 809).

NO MIGRATION VARIANCE PETITION ASSIGNMENT RF 126

TRUCON CODE RF 126

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste	X			
				Maintenance				

408097

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

RF-W069

CONTAINER:	Drum	Container Matl:	metal	Liner Type:	rigid	Number Stored:	46
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.21 m3	Liner Material:	HDPE	Number Projected:	233

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	475.0	316.7	617.5
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	203.0	135.3	263.5
Soils	0.0	0.0	0.0
Packaging Materials, Steel	132.0		
Packaging Material, Plastic	51.9		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	12.8	27.7	m3
End of 1993:	4.4	9.5	m3
1994:	0.7	1.5	m3/yr
1995:	1.4	3.1	m3/yr
1996:	1.0	2.2	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	1.0	2.1	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239	5.94E-01	Curies/m3
Pu240	1.36E-01	Curies/m3
Pu241	3.24E+00	Curies/m3
Am241	0.00E+00	Curies/m3

TYPICAL EPA CODES APPLICABLE

D001C
D006A
D007A
D008A
F001
F002
F005A

Comments

IDCs 430 and 431 require immobilization to convert to final waste form (IDC 809). Projected actual x 2.16 = final waste form.

Footnotes

1. The inventory for this waste stream contains mixed residues (0.21 m3 in 1992 and 0.63 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste ~~streams as defined in the "Conceptual Design Report for Residue Elimination at~~

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF   WASTE TYPE MTRU   HANDLING CH   GENERATOR SITE RF

WASTE STREAM MWIR ID	RF-W076	**STREAM NAME**	Process Residues/TRM
WIPP ID	RF-W076		
Local ID	289, 292, 299	**DESCRIPTION**	Uncategorized Inorganic Particulates
MATRIX CODE	3119		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Solidified Inorganics		
Site Matrix Description	This waste stream was previously named "Particulate-Sludge/TRU Mixed (2)." IDCNo. 044, 050, 092, 099, 159, 289, 290, 332, 340, 422, and 423. This waste was generated from plutonium recovery operations in Building 771. The waste consists of low-purity oxide heel (IDC 289), incineration sludge (IDC 292), miscellaneous sludge (IDC 299), sludge from size reduction area (IDC 340), grit (IDC 372), soot (IDC 422), and soot heel (IDC 423). The waste is packaged in 55-gallon drums with multiple bag liners. Inventory data include mixed residues in these IDCs. IDC 044 - AM and Misc. Oxide.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT   TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RF WASTE TYPE MTRU HANDLING CH GENERATOR SITE RF

RF-W076 CONTAINER: Drum Type/Size: 55-gallon

Container Matl: metal Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid Liner Material: HDPE

Number Stored: 0 Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D001C
D002
D003
D006A
D007A
D008A
F001
F002
F002
F005A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity

Comments

Final waste form volume included in other waste forms as REP output.
No isotopic data available.

Footnotes

1. The inventory for this waste stream contains mixed residues (17.39 m3 in 1992 and 15.91 m3 in 1993) in addition to the mixed waste inventory described above. This residue stream will be processed through the Rocky Flats Residue Elimination Program which will generate several WIPP WAC certifiable waste streams as defined in the "Conceptual Design Report for Residue Elimination at Rocky Flats" (EG&G Rocky Flats, 1994). Volume changes, waste stream changes, and processing schedules for residues are defined in this document.
2. No isotopic information is available.

Hanford Site

HANFORD SITE (RL)
WASTE STREAM PROFILE METHODOLOGY

APPROACH

The approach used in preparing the RL waste stream profiles is as follows:

- Waste is divided between "past practice waste" (1970 through 1986) and currently-generated waste (1987 through 2028). Currently-generated waste includes projected waste generation.
- Past practice waste is grouped by generators, whereas currently-generated waste is grouped by waste matrix. The reasons for grouping the data in this manner are as follows: 1) the interim storage practice was changed from below ground surface (trenches) to above surface (storage buildings) in the 1986/1987 time period; 2) the By-Product Rule was issued by DOE on May 1, 1987, which compelled the hazardous components of TRU waste to be regulated by EPA under RCRA; 3) more detailed matrix information per container has been collected from the generator since 1987, and stored in the site's record waste tracking system; and 4) starting approximately 1986, waste generators began packaging the waste in accordance with the WIPP Waste Acceptance Criteria, thus reducing the need for additional waste processing prior to shipping to WIPP.
- Currently-generated waste streams were identified by reviewing each container record in the site's solid waste tracking system. Groups of containers that have similar physical characteristics and chemical contaminants (mixed only) were placed into a treatability group waste stream. The waste was then separated into drums, boxes, and RH canisters.

ASSUMPTIONS

The following assumptions were made by the site in repackaging the waste into the final waste form:

1. *General*

   A. A portion of the thermocouple assemblies, transfer pumps, mixing pumps, and other equipment in the single-shell and double-shell tanks will be removed, size-reduced, decontaminated, and assayed. Assay information will be used to designate the waste packages as low-level waste or TRU waste. The projection is that 10% of the equipment will be designated as RH-TRU, mixed waste and 90% will be designated as remote-handled, low level mixed waste. (WHC-EP 0768, Solid Waste 30-Year Volume Summary, p. 4-6, Table 4-1)

   B. TRU waste forecast volume data has been provided from the following off-site waste generators: AL, AE, BCL, LB, LL, and Santa Susana Field Laboratory (Rockwell, Canoga Park). The assumption is that TRU waste from these off-site waste generators will be received at RL for treatment in the Waste Receiving and Processing Facility (WRAP) and shipment to WIPP. (WHC-EP-0768, Solid Waste 30-Year Volume Summary)

HANFORD SITE (RL)
WASTE STREAM PROFILE METHODOLOGY (continued)

C. PUREX transition activities will generate 117 m^3 of CH-TRU and mixed TRU waste. The PUREX facility is currently undergoing transition activities towards decontamination and decommissioning. The facility transition activities at PUREX will provide a model for the subsequent transition of other canyon-type facilities in the future. Waste generation estimates from PUREX and other canyon type facilities have been included in the forecast. (WHC-EP-0768, Solid Waste 30-Year Volume Summary)

D. Approximately 140 m^3 of spent research reactor fuel stored in trenches with the TRU waste is managed as TRU waste. Future evaluations may determine that this waste should be managed by the National Spent Fuel Program. (WHC-SD-SNF-TI-001, Revision 0)

E. The final disposition of buried TRU contaminated waste has not been made. Consequently, the volume is not included in the waste projected for shipment to WIPP.

2. Retrieval of Stored TRU Waste

A. Stored TRU waste consists of existing TRU waste generated since May 1970 through December 1993. This waste does not include waste, originally designated as TRU waste, that has been assayed and redesignated as low-level waste during the calendar years (CY) 1986 to 1993.

B. CH-TRU Waste

- Of the TRU waste stored from May 1970 to December 1985 that has not been assayed and redesignated as low-level waste (by December 1993), 50% of the waste stored in 55-gallon drums is expected to be TRU waste upon assaying. The remainder is expected to be low-level waste upon assaying. (WHC-EP-0225, Revision 1, Table 4-26)

- Waste is drums will be opened, examined to remove non-certifiable waste, and then packaged into new drums. The projection is that repackaging the waste will result in a 35% increase in the volume of TRU-certified waste in drums. (WHC-SD-W026-SDRD-001, Revision 3)

- Waste in boxes will be opened, and size-reduced to fit into TRUPACT-II SWBs. No volume reduction is projected.

- The site's solid waste tracking system does not distinguish between specific types of metals. If lead is present, then "other metals" is assumed to represent 100% of the metals in the container. Otherwise, iron-based metals is assumed to be 80% and aluminum-based metal is assumed to be 20% of the metal (reference: WHC-EP-225 Rev 1, TRU Waste Characterization Based on Current Records).

HANFORD SITE (RL)
WASTE STREAM PROFILE METHODOLOGY (continued)

C. RH-TRU Waste

- Approximately 149 m^3 of the TRU waste in drums and boxes stored in trenches, approximately 24 m^3 of the TRU waste in 1-, 2-, and 5-gallon cans stored in alpha caissons, and approximately 140 m^3 of irradiated material in drums, boxes and casks stored in trenches received prior to CY 1994 will be classified as RH-TRU waste when it is processed through the WRAP facility.

- No volume reduction is projected due to size reduction for transport in RH canisters.

- A small amount of CH-TRU (2.0E+2 m^3) is expected to be retrieved and packaged as RH-TRU waste.

3. Newly-generated TRU waste

A. This waste will be generated during the fiscal years 1994 through 2013.

B. CH-TRU Waste

- One hundred percent of the waste in drums will be managed as TRU waste with 10% considered noncertifiable and requiring treatment.

- All boxed waste (except waste in SWBs) will require size reduction in the WRAP facility.

C. RH-TRU Waste

- Newly-generated RH-TRU waste will be stored in shielded drums pending repackaging in RH-canisters in the WRAP facility.

- RH-TRU waste retrieved from the 618-11 burial ground will include some soil surrounding breached containers. It is assumed that this soil will increase the waste volume to be retrieved by 25%. No volume reduction is projected for treatment in the WRAP facility.

- A portion of the single-shell and double-shell tank equipment will be size-reduced and decontaminated, assayed, and shipped to WIPP as RH-TRU waste. The assumption is the 90% of the equipment will be classified as remote-handled, low level mixed waste and 10% will be RH-TRU, mixed waste.

- Most of the waste generated between 1987 and 1993 is debris waste. As such, projected RH-TRU waste is assumed to be debris waste.

- The mixed waste contaminants and radionuclide composition of projected RH-TRU waste are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL

WASTE STREAM MWIR ID		**STREAM NAME**	TRU Mixed Inorganic Debris with Mercury
WIPP ID	RL-M001		
Local ID	RL-TB-001	**DESCRIPTION**	This waste stream was generated from the cleanup and maintenance activities of various process and support operations from the Plutonium Finishing Plant.
MATRIX CODE			
SITE FINAL FORM IDC	073		
Waste Matrix Code Group	Uncategorized Metal		
Site Matrix Description	This waste stream consists primarily of Inorganic debris. Some of the containers contain organic debris (Plastic and cellulosics). The hazardous constituents are metals, including Mercury.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

9 1 3 0 0 0

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL

RL-M001 CONTAINER: Standard Waste Box
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type: bag
Liner Material: plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	198.8	0.0	248.5
Aluminum-Based Metals/Alloys	49.7	0.0	248.5
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	2.1	2.1	2.1
Rubber	0.0	0.0	0.0
Plastics	13.5	13.5	13.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	7.1	7.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.2	0.2	m3/yr
1996:	0.1	0.1	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	48.2	48.2	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.81E-02	Curies/m3
Pu239	6.22E-01	Curies/m3
Pu240	1.40E-01	Curies/m3
Pu241	3.73E+00	Curies/m3
Pu242	8.14E-06	Curies/m3

TYPICAL EPA CODES APPLICABLE

D006

D009

Comments

End of 92 volumes not compiled.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL

WASTE STREAM MWIR ID		**STREAM NAME**	TRU Mixed Inorganic Debris Metals without Mercury
WIPP ID	RL-M002	**DESCRIPTION**	This waste stream was generated from the cleanup and maintenance activities of various process and support operations from the fuel reprocessing plant (PUREX) and the Plutonium Refinishing Plant.
Local ID	RL-TB-002		
MATRIX CODE			
SITE FINAL FORM IDC	073		
Waste Matrix Code Group	Uncategorized Metal		
Site Matrix Description	This waste stream consists primarily of inorganic metal debris. Some of the containers contain organic debris (Plastic, rubber, cellulosics). The hazardous constituents are metals.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

4180000

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL

RL-M002

CONTAINER: Standard Waste Box
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type: bag
Liner Material: plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	91.4	3.3	403.8
Aluminum-Based Metals/Alloys	22.9	3.3	403.8
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	14.7	1.1	54.1
Rubber	0.2	0.2	0.2
Plastics	17.9	4.6	89.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.9	0.9	0.9
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	11.3	11.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.3	0.3	m3/yr
1996:	0.1	0.1	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	76.4	76.4	m3/yr

TYPICAL EPA CODES APPLICABLE

D008

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.48E-02	Curies/m3
Pu239	5.10E-01	Curies/m3
Pu240	1.14E-01	Curies/m3
Pu241	3.06E+00	Curies/m3
Pu242	6.67E-06	Curies/m3

Comments

End of 92 volumes not compiled.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RL

WASTE STREAM MWIR ID		**STREAM NAME**	TRU Mixed Inorganic Debris Metal with Corrosives
WIPP ID	RL-M003	**DESCRIPTION**	This waste stream was generated from the cleanup and maintenance activities of various process and support operations from the Plutonium Finishing Plant.
Local ID	RL-TB-003		
MATRIX CODE			
SITE FINAL FORM IDC	073		

Waste Matrix Code Group: Uncategorized Metal

Site Matrix Description: This waste stream consists primarily of Inorganic debris. Some of the containers contain organic debris (plastic, cellulosics, rubber). The hazardous constituents are corrosives.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RL

RL-M003

CONTAINER:	Standard Waste Box	Container Matl:	steel	Liner Type:	bag
Type/Size:		Int. Vol/Ctnr:	1.9 m3	Liner Material:	plastic
Number Stored:		Number Projected:			

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	171.4	0.0	214.2
Aluminum-Based Metals/Alloys	42.8	0.0	214.2
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	1.1	1.1	1.1
Rubber	1.0	1.0	1.0
Plastics	27.4	27.4	27.4
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	3.2	3.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.1	0.1	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	21.2	21.2	m3/yr

TYPICAL EPA CODES APPLICABLE

D002

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	5.90E-03	Curies/m3
Pu239	2.03E-01	Curies/m3
Pu240	4.55E-02	Curies/m3
Pu241	1.21E+00	Curies/m3
Pu242	2.65E-06	Curies/m3

Comments

End of 92 volumes not compiled.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RL, PNL

WASTE STREAM

MWIR ID	
WIPP ID	RL-M004
Local ID	RL-TB-004
MATRIX CODE	
SITE FINAL FORM IDC	001

STREAM NAME TRU Mixed Heterogeneous Debris (State Only)

DESCRIPTION This waste stream was generated from the cleanup and maintenance activities of various research, process, and support operations from Pacific Northwest Laboratories and the Plutonium Finishing Plant.

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: This waste stream consists primarily of Heterogeneous debris (filters). Some of the containers contain organic debris (Plastic). The waste is hazardous by State regulation.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

00821

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL, PNL

RL-M004

CONTAINER: Standard Waste Box
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type: bag
Liner Material: plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	2.9	1.2	5.9
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

Comments

End of 92 volumes not compiled.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	4.2	4.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.1	0.1	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	28.3	28.3	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Co60	1.00E-04	Curies/m3
Np237	3.50E-06	Curies/m3
Pu239	4.29E-01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL, PNL, KERR MCGEE

WASTE STREAM

MWIR ID	
WIPP ID	RL-M005
Local ID	RL-TB-005
MATRIX CODE	
SITE FINAL FORM IDC	071

STREAM NAME TRU Mixed Homogeneous Solids W/ Merc.

DESCRIPTION This waste stream was generated from the cleanup and maintenance activities of various research, process, and support operations from Pacific Northwest Laboratories, Kerr McGee, and the Plutonium Finishing Plant.

Waste Matrix Code Group: Solidified Inorganics

Site Matrix Description: This waste stream consists primarily of Homogeneous solids. Some of the containers contain organic debris (Plastic, cellulosics). The hazardous constituents vary and include metals including mercury, ignitables, corrosives, and/or reactives, and PCBs

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	X
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

G00823

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RL, PNL, KERR MCGEE

RL-M005 CONTAINER: Drum | Type/Size: 55-gallon | Container Matl: steel | Int. Vol/Ctnr: 0.208 m3 | Liner Type: rigid | Liner Material: HDPE | Number Stored: | Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	27.3	7.2	57.7
Rubber	0.4	0.4	0.4
Plastics	18.8	4.6	37.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

End of 92 volumes not compiled.

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	1.5	1.5	m3
1994:	1.5	1.5	m3/yr
1995:	1.4	1.4	m3/yr
1996:	2.2	2.2	m3/yr
1997:	1.2	1.2	m3/ry
1998-2002:	4.8	4.8	m3/yr
2003-2022:	9.9	9.9	m3/yr

TYPICAL EPA CODES APPLICABLE

D001

D002

D009

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.40E-03	Curies/m3
Cm244	8.09E-03	Curies/m3
Cs137	1.00E-04	Curies/m3
Pu238	2.16E-03	Curies/m3
Ru106	5.30E-03	Curies/m3
Pu239	7.43E-02	Curies/m3
Pu240	1.67E-02	Curies/m3
Pu241	4.46E-01	Curies/m3
Pu242	9.72E-07	Curies/m3

1280041

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RL, KERR MCGEE

WASTE STREAM	
MWIR ID	
WIPP ID	RL-M006
Local ID	RL-TB-006
MATRIX CODE	
SITE FINAL FORM IDC	071
STREAM NAME	TRU Mixed Inorg. Homogeneous Solids w/out Merc.
DESCRIPTION	This waste stream was generated from the cleanup and maintenance activities of various research, process, and support operations from the fuel reprocessing plant (PUREX), Kerr McGee, and the Plutonium Finishing Plant.
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	This waste stream consists primarily of inorganic homogeneous solids. Some of the containers contain organic debris (rubber, cellulosics). The hazardous constituents are organics.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL, KERR MCGEE

RL-M006

CONTAINER:	Drum	Container Matl:	steel	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	HDPE

Number Stored:

Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	14.7	0.0	18.4
Aluminum-Based Metals/Alloys	3.7	0.0	18.4
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	33.7	8.6	83.8
Rubber	28.3	5.5	91.4
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

End of 92 volumes not compiled.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	1.6	1.6	m3
1994:	1.7	1.7	m3/yr
1995:	1.5	1.5	m3/yr
1996:	2.4	2.4	m3/yr
1997:	1.3	1.3	m3/ry
1998-2002:	5.3	5.3	m3/yr
2003-2022:	11.0	11.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D001

D019

F003

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.45E-02	Curies/m3
Pu239	4.99E-01	Curies/m3
Pu240	1.12E-01	Curies/m3
Pu241	2.99E+00	Curies/m3
Pu242	6.52E-06	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL

WASTE STREAM
MWIR ID
WIPP ID RL-M007
Local ID RL-TB-007

MATRIX CODE

SITE FINAL FORM IDC 72

STREAM NAME TRU Mixed Soils without Mercury

DESCRIPTION This waste stream was generated from the cleanup activities of the 201C process facility.

Waste Matrix Code Group: Soils

Site Matrix Description: This waste stream consist primarily of Soils. Some of the containers contain organic debris (rubber, cellulosics, plastic) and inorganic debris (metal). The hazardous constituents are metals.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

429008

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL

RL-M007

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	22.8	0.5	38.8
Aluminum-Based Metals/Alloys	5.7	0.5	38.8
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	63.1	1.2	67.3
Rubber	20.9	1.8	210.4
Plastics	33.1	0.6	33.6
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	421.0	254.3	570.8
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	11.9	11.9	m3
1994:	0.5	0.5	m3/yr
1995:	0.3	0.3	m3/yr
1996:	0.5	0.5	m3/yr
1997:	0.2	0.2	m3/ry
1998-2002:	0.7	0.7	m3/yr
2003-2022:	1.6	1.6	m3/yr

TYPICAL EPA CODES APPLICABLE

D007

D010

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.48E+00	Curies/m3
Cs137	2.34E-01	Curies/m3
Pu238	3.78E-04	Curies/m3
Sr90	5.38E+00	Curies/m3
Pu239	1.30E-02	Curies/m3
Pu240	2.92E-03	Curies/m3
Pu241	7.79E-02	Curies/m3
Pu242	1.70E-07	Curies/m3
U234	9.98E-04	Curies/m3
U235	1.79E-05	Curies/m3
U238	1.11E-03	Curies/m3

Comments

End of 92 volumes not compiled.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RL, PNL, KERR MCGEE

WASTE STREAM

MWIR ID	
WIPP ID	RL-M008
Local ID	RL-TB-008
MATRIX CODE	
SITE FINAL FORM IDC	073

STREAM NAME TRU Mixed Inorganic Debris Metals without Mercury

DESCRIPTION This waste stream was generated from the cleanup and maintenance activities of various research, process, and support operations from Kerr McGee, Pacific Northwest Laboratories, the fuel reprocessing plant (PUREX), and the Plutonium Finishing Plant. A volume of 40.02 is non-mixed waste.

Waste Matrix Code Group Uncategorized Metal

Site Matrix Description This waste stream consist primarily of Inorganic debris metals. Some of the containers contain organic debris (plastic, rubber, cellulosics), and soils. The hazardous constituents vary and include metals, and ignitables, corrosives, and/or reactives.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL, PNL, KERR MCGEE

RL-M008

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	158.4	0.1	2096.0
Aluminum-Based Metals/Alloys	39.6	0.1	524.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	7.5	0.5	139.0
Rubber	4.9	0.3	245.6
Plastics	24.8	1.3	750.8
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	2.9	0.9	48.7
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

End of 92 volumes not compiled.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	48.2	48.2	m3
1994:	8.2	8.2	m3/yr
1995:	14.7	14.7	m3/yr
1996:	34.3	34.3	m3/yr
1997:	8.9	8.9	m3/ry
1998-2002:	10.1	10.1	m3/yr
2003-2022:	52.4	52.4	m3/yr

TYPICAL EPA CODES APPLICABLE

D002

D006

D007

D008

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.55E-01	Curies/m3
Cm244	1.23E+00	Curies/m3
Cs137	4.00E-04	Curies/m3
Np237	4.67E-05	Curies/m3
Pu238	5.29E-01	Curies/m3
Pu239	4.59E+00	Curies/m3
Pu240	1.06E+00	Curies/m3
Pu241	3.04E+01	Curies/m3
Pu242	8.78E-05	Curies/m3
Ra226	8.90E-04	Curies/m3
U234	6.51E-05	Curies/m3
U235	6.66E-05	Curies/m3
U238	2.23E-06	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL, KERR MCGEE

WASTE STREAM

MWIR ID

WIPP ID RL-M009

Local ID RL-TB-009

MATRIX CODE

SITE FINAL FORM IDC 074

STREAM NAME TRU Mixed Organic Debris with corrosives

DESCRIPTION This waste stream was generated from the cleanup and maintenance activities of varous research, process, and support operations from Kerr McGee, the fuel reprocessing plant (PUREX), and the Plutonium Finishing Plant.

Waste Matrix Code Group: Combustible

Site Matrix Description: This waste stream consists primarily of Organic debris. Some of the containers contain inorganic debris (metals) and soils. The hazardous constituents are corrosives.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000831

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL, KERR MCGEE

RL-M009

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.1
Aluminum-Based Metals/Alloys	0.0	0.0	0.1
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	1.7	0.0	96.1
Rubber	0.4	0.0	28.7
Plastics	0.4	0.0	28.7
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.5	0.0	48.1
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

End of 92 volumes not compiled.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	19.2	19.2	m3
1994:	0.5	0.5	m3/yr
1995:	0.4	0.4	m3/yr
1996:	0.7	0.7	m3/yr
1997:	0.4	0.4	m3/ry
1998-2002:	1.4	1.4	m3/yr
2003-2022:	11.6	11.6	m3/yr

TYPICAL EPA CODES APPLICABLE

D002

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	5.09E-01	Curies/m3
Pu239	1.81E+01	Curies/m3
Pu240	4.06E+00	Curies/m3
Pu241	1.05E+02	Curies/m3
Pu242	2.29E-04	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RL

WASTE STREAM

MWIR ID:

WIPP ID: RL-M010

Local ID: RL-TB-010

MATRIX CODE:

SITE FINAL FORM IDC: 074

STREAM NAME: TRU Mixed Organic Debris with Mercury

DESCRIPTION: This waste stream was generated from the cleanup and maintenance activities of the various process and support operations from the fuel reprocessing plant (PUREX) and Plutonium Finishing Plant.

Waste Matrix Code Group: Combustible

Site Matrix Description: This waste stream consists primarily of Organic debris. Some of the containers contain inorganic debris (metals, including mercury), and soils. The hazardous constituents are metals including mercury and ignitables, corrosives, and/or reactives.

NO MIGRATION VARIANCE PETITION ASSIGNMENT:

TRUCON CODE:

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

0083 3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL

RL-M010

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	14.8	4.8	32.6
Aluminum-Based Metals/Alloys	3.7	0.0	32.6
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	2.6	1.4	3.8
Rubber	0.0	0.0	0.0
Plastics	51.8	39.7	65.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	2.4	2.4	2.4
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

End of 92 volumes not compiled.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.4	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.3	0.3	m3/yr

TYPICAL EPA CODES APPLICABLE

D002
D006
D009

TYPICAL ISOTOPIC COMPOSITION

Nuclide	*Activity*	
Am241	6.86E-04	Curies/m3
Pu238	3.34E-01	Curies/m3
Pu239	1.15E+01	Curies/m3
Pu240	2.57E+00	Curies/m3
Pu241	6.88E+01	Curies/m3
Pu242	1.50E-04	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL

WASTE STREAM MWIR ID	
WIPP ID	RL-M011
Local ID	RL-TB-011
MATRIX CODE	
SITE FINAL FORM IDC	74
STREAM NAME	TRU Mixed Organic Debris Metals without Mercury
DESCRIPTION	This waste stream was generated from the cleanup and maintenance activities of various process and support operations from the fuel reprocessing plant (PUREX) and the Plutonium Finishing Plant.
Waste Matrix Code Group	Combustible
Site Matrix Description	This waste stream consists primarily of Organic debris. Some of the containers contain inorganic debris (metals) and soils. The hazardous constituents are metals including mercury and ignitables, corrosives, and/or reactives.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

0008355

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL

RL-M011

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type: rigid
Liner Material: HDPE
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	47.9	2.3	200.0
Aluminum-Based Metals/Alloys	12.0	2.4	200.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	25.4	2.4	96.2
Rubber	0.0	0.0	0.0
Plastics	50.9	21.7	155.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	31.4	26.0	101.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

End of 92 volumes not compiled.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.8	0.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.1	0.1	m3/yr
2003-2022:	0.5	0.5	m3/yr

TYPICAL EPA CODES APPLICABLE

D001
D002
D007
D008

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	3.47E-01	Curies/m3
Pu239	1.19E+01	Curies/m3
Pu240	2.68E+00	Curies/m3
Pu241	7.15E+01	Curies/m3
Pu242	1.56E-04	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL

WASTE STREAM MWIR ID		**STREAM NAME**	TRU Mixed Organic Debris contaminated w/Organics
WIPP ID	RL-M012	**DESCRIPTION**	This waste stream was generated from the cleanup and maintenance activities of various process and support operations from the Plutonium Finishing Plant.
Local ID	RL-TB-012		
MATRIX CODE			
SITE FINAL FORM IDC	074		
Waste Matrix Code Group	Combustible		
Site Matrix Description	This waste stream consists primarily of Organic debris. Some of the containers contain inorganic debris (metals) and soils. The hazardous constituents are metals including mercury and organics.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RL

RL-M012

CONTAINER:	Drum	Container Matl:	steel	Liner Type:	rigid	Number Stored:	
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	HDPE	Number Projected:	

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	125.7	0.0	157.1
Aluminum-Based Metals/Alloys	31.4	0.0	157.1
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	5.7	5.7	5.7
Rubber	119.1	119.1	119.1
Plastics	76.2	76.2	76.2
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	28.6	28.6	28.6
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.2	0.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.1	0.1	m3/yr

TYPICAL EPA CODES APPLICABLE

D019

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	4.06E-01	Curies/m3
Pu238	1.88E-01	Curies/m3
Pu239	6.54E+00	Curies/m3
Pu240	1.45E+00	Curies/m3
Pu241	3.87E+01	Curies/m3
Pu242	8.44E-05	Curies/m3

Comments

End of 92 volumes not compiled.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL, PNL

WASTE STREAM MWIR ID

WIPP ID RL-M013

Local ID RL-T8-013

MATRIX CODE

SITE FINAL FORM IDC 074

STREAM NAME TRU Mixed Organic Debris/Contaminated w/Organics

DESCRIPTION This waste stream was generated from the cleanup and maintenance activities of various research, process, and support operations from Pacific Northwest Laboratories (through the 340 building loading facility) and the Plutonium Finishing Plant.

Waste Matrix Code Group: Combustible

Site Matrix Description: This waste stream consts primarily of Organic debris. Some of the containers contain inorganic debris (metals) and soils. The hazardous constituents are organics.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

008330

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RL, PNL

RL-M013

CONTAINER: Drum | Container Matl: steel | Liner Type: rigid | Number Stored:

Type/Size: 55-gallon | Int. Vol/Ctnr: 0.208 m3 | Liner Material: HDPE | Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	69.7	38.8	144.2
Aluminum-Based Metals/Alloys	17.4	0.0	144.2
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	11.7	1.1	19.2
Rubber	28.2	4.8	72.1
Plastics	81.5	7.2	177.9
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	15.7	4.8	27.4
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

End of 92 volumes not compiled.

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.6	0.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.4	0.4	m3/yr

TYPICAL EPA CODES APPLICABLE

D019

F001

F002

F003

F004

F005

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	4.15E-01	Curies/m3
Ce144	6.10E-03	Curies/m3
Cs134	3.00E-03	Curies/m3
Cs137	3.68E-02	Curies/m3
Eu152	1.60E-01	Curies/m3
Eu154	3.04E-01	Curies/m3
Eu155	4.64E-02	Curies/m3
Pu238	3.37E-01	Curies/m3
Pu239	6.07E+00	Curies/m3
Pu240	1.36E+00	Curies/m3
Pu241	4.23E+01	Curies/m3
Pu242	7.87E-05	Curies/m3
Ru106	1.20E-03	Curies/m3
Sr90	6.70E-03	Curies/m3
Ta182	6.00E-04	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL

WASTE STREAM MWIR ID	
WIPP ID	RL-M014
Local ID	RL-TB-014
MATRIX CODE	
SITE FINAL FORM IDC	075
STREAM NAME	TRU Mixed Leaded Gloves/Aprons with Mercury
DESCRIPTION	This waste stream was generated from the cleanup and maintenance activities of various process and support operations from the fuel reprocessing plant (PUREX) and the Plutonium Finishing Plant.
Waste Matrix Code Group	Combustible
Site Matrix Description	This waste stream consists primarily of leaded gloves/aprons. Some of the containers contain inorganic debris (metals, including mercury), organic debris (plastic, rubber, cellulosics), and soils.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000841

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RL

RL-M014

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	78.8	0.1	336.6
Aluminum-Based Metals/Alloys	19.7	0.1	336.6
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	2.2	0.1	19.2
Rubber	100.8	27.6	211.2
Plastics	28.9	1.3	74.1
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	42.7	4.2	134.5
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	4.6	4.6	m3
1994:	0.1	0.1	m3/yr
1995:	0.1	0.1	m3/yr
1996:	0.2	0.2	m3/yr
1997:	0.1	0.1	m3/ry
1998-2002:	0.3	0.3	m3/yr
2003-2022:	2.8	2.8	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	6.41E-02	Curies/m3
Ce144	6.10E-03	Curies/m3
Pu238	1.87E-01	Curies/m3
Pu239	6.41E+00	Curies/m3
Pu240	1.44E+00	Curies/m3
Pu241	3.84E+01	Curies/m3
Pu242	8.30E-05	Curies/m3

TYPICAL EPA CODES APPLICABLE

D002
D005
D006
D007
D008
D009

Comments

End of 92 volumes not compiled.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL, PNL

WASTE STREAM

MWIR ID	
WIPP ID	RL-M015
Local ID	RL-TB-015
MATRIX CODE	
SITE FINAL FORM IDC	075

STREAM NAME TRU Mixed Leaded Gloves/Aprons Metals w/out Merc.

DESCRIPTION This waste stream was generated from the cleanup and maintenance activities of various research, process and support operations from the Pacific Northwest Laboratories, the fuel reprocessing plant (PUREX), and the Plutonium Finishing Plant.

Waste Matrix Code Group: Combustible

Site Matrix Description: This waste stream consists primarily of leaded gloves/aprons. Some of the containers contain inorganic debris (metals, without mercury), organic debris (plastic, rubber, cellulosics), and soils.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000843

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL, PNL

RL-M015

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	118.9	0.0	1048.3
Aluminum-Based Metals/Alloys	29.7	0.0	1048.3
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	9.6	0.0	65.3
Rubber	77.2	1.5	201.8
Plastics	55.9	3.6	302.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	14.4	2.2	92.9
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

End of 92 volumes not compiled.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	15.1	15.1	m3
1994:	0.4	0.4	m3/yr
1995:	0.3	0.3	m3/yr
1996:	0.5	0.5	m3/yr
1997:	0.3	0.3	m3/ry
1998-2002:	1.1	1.1	m3/yr
2003-2022:	9.1	9.1	m3/yr

TYPICAL EPA CODES APPLICABLE

D002
D005
D006
D007
D008

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	6.48E-02	Curies/m3
Pu238	3.10E-01	Curies/m3
Pu239	1.01E+01	Curies/m3
Pu240	2.27E+00	Curies/m3
Pu241	6.06E+01	Curies/m3
Pu242	1.36E-04	Curies/m3
Ra226	1.64E-02	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RL

WASTE STREAM MWIR ID	
WIPP ID	RL-M016
Local ID	RL-TB-016
MATRIX CODE	
SITE FINAL FORM IDC	075
STREAM NAME	TRU Mixed Leaded Gloves/Aprons Metals/Org w/o Merc
DESCRIPTION	This waste stream was generated from the cleanup and maintenance activities of various process and support operations from the Plutonium Finishing Plant.
Waste Matrix Code Group	Combustible
Site Matrix Description	This waste stream consists primarily of Leaded gloves/aprons. some of the containers contain inorganic debris (metals), organic debris (plastic, rubber, cellulosics), and soils. The hazardous constituents are metals and organics.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RL

RL-M016

CONTAINER: Drum | Type/Size: 55-gallon

Container Matl: steel | Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid | Liner Material: HDPE

Number Stored: | Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	96.0	2.4	257.2
Aluminum-Based Metals/Alloys	24.0	2.4	257.2
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	29.3	2.4	86.6
Rubber	125.2	48.1	197.1
Plastics	66.3	38.5	115.4
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	37.9	16.2	72.1
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

End of 92 volumes not compiled.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	1.7	1.7	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.1	0.1	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.1	0.1	m3/yr
2003-2022:	1.0	1.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D007

D008

D019

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.32E+00	Curies/m3
Pu238	5.77E-01	Curies/m3
Pu239	1.03E+01	Curies/m3
Pu240	2.30E+00	Curies/m3
Pu241	7.84E+01	Curies/m3
Pu242	1.33E-04	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL

WASTE STREAM MWIR ID		**STREAM NAME**	TRU Mixed Organic Labpacks
WIPP ID	RL-M017	**DESCRIPTION**	This waste stream was generated from the cleanup and maintenance activities of various process and support operations from the Plutonium Finishing Plant.
Local ID	RL-TB-017		
MATRIX CODE			
SITE FINAL FORM IDC	076		
Waste Matrix Code Group	Solidified Organics		
Site Matrix Description	This waste stream consists primarily of organic labpacks. Some of the containers contain inorganic debris (metals), organic debris (plastic, cellulosics).		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RL

RL-M017

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	42.9	42.9	42.9
Rubber	0.0	0.0	0.0
Plastics	46.4	46.4	46.4
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	83.2	83.2	83.2
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE .ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.3	0.3	m3
1994:	0.1	0.1	m3/yr
1995:	0.6	0.6	m3/yr
1996:	0.3	0.3	m3/yr
1997:	0.1	0.1	m3/ry
1998-2002:	0.2	0.2	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D001

F003

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.89E-03	Curies/m3
Pu239	6.48E-02	Curies/m3
Pu240	1.45E-02	Curies/m3
Pu241	3.88E-01	Curies/m3
Pu242	8.47E-07	Curies/m3

Comments

End of 92 volumes not compiled.

000843

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RL

WASTE STREAM

MWIR ID	
WIPP ID	RL-M018
Local ID	RL-TB-018
MATRIX CODE	
SITE FINAL FORM IDC	076

STREAM NAME TRU Mixed Organic Labpacks (State Only)

DESCRIPTION This waste stream was generated from the cleanup and maintenance activities of various process and support operations from the Plutonium Finishing Plant.

Waste Matrix Code Group: Solidified Organics

Site Matrix Description: This waste stream consists primarily of Organic labpacks. Some of the containers contain organic debris (plastic, cellulosics). The waste is hazardous by state regulation.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

C48000

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL   WASTE TYPE MTRU   HANDLING CH   GENERATOR SITE RL

RL-M018

CONTAINER:	Drum	Container Matl:	steel	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	17.8	8.6	26.9
Rubber	0.0	0.0	0.0
Plastics	100.9	18.9	121.1
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	32.6	32.6	32.6
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	1.9	1.9	m3
1994:	0.3	0.3	m3/yr
1995:	4.2	4.2	m3/yr
1996:	1.7	1.7	m3/yr
1997:	0.5	0.5	m3/ry
1998-2002:	1.3	1.3	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.99E-02	Curies/m3
Pu239	6.83E-01	Curies/m3
Pu240	1.53E-01	Curies/m3
Pu241	4.09E+00	Curies/m3
Pu242	8.93E-06	Curies/m3

Comments

End of 92 volumes not compiled.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL

WASTE STREAM MWIR ID		**STREAM NAME**	TRU Mixed Elemental Hazardous Metals w/Merc.
WIPP ID	RL-M019	**DESCRIPTION**	This waste stream was generated from the cleanup and maintenance activities of various research, process and support operations from the Pacific Northwest Laboratories and the Plutonium Finishing Plant.
Local ID	RL-TB-019		
MATRIX CODE			
SITE FINAL FORM IDC	077		
Waste Matrix Code Group	Lead/Cadmium Metal Waste		
Site Matrix Description	This waste stream consists primarily of elemental hazardous metals. Some of the containers contain inorganic debris (metals, including mercury), organic debris (plastic, rubber, cellulosics), and soils.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

00851

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL

RL-M019 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	55.6	0.1	182.3
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	14.8	0.1	54.8
Rubber	64.1	30.2	123.8
Plastics	39.7	1.2	86.7
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	24.4	10.5	49.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

End of 92 volumes not compiled.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	1.3	1.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D002
D005
D006
D007
D008
D009

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.88E-01	Curies/m3
Pu238	2.09E-01	Curies/m3
Pu239	7.17E+00	Curies/m3
Pu240	1.61E+00	Curies/m3
Pu241	4.30E+01	Curies/m3
Pu242	9.38E-05	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL, PNL

WASTE STREAM MWIR ID

WIPP ID RL-M020

Local ID RL-TB-020

MATRIX CODE

SITE FINAL FORM IDC 077

STREAM NAME TRU Mixed Elemental Haz. metals w/out Merc.

DESCRIPTION This waste stream was generated from the cleanup and maintenance activities of various research, process and support operations from the 222-S Analytical Laboratory, Pacific Northwest Laboratories, and the Plutonium Finishing Plant.

Waste Matrix Code Group: Lead/Cadmium Metal Waste

Site Matrix Description: This waste stream consists primarily of elemental hazardous metals. Some of the containers contain inorganic debris (metals without mercury), organic debris (plastic, rubber, cellulosics), and soils.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000853

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RL, PNL

RL-M020

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type: rigid
Liner Material: HDPE
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	340.4	2.2	940.4
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	9.2	0.1	67.3
Rubber	30.3	11.2	121.8
Plastics	21.2	5.8	43.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	23.2	7.2	77.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	1.9	1.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D007
D008

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	3.47E-01	Curies/m3
Pu238	2.52E-01	Curies/m3
Pu239	8.64E+00	Curies/m3
Pu240	1.94E+00	Curies/m3
Pu241	5.18E+01	Curies/m3
Pu242	1.13E-04	Curies/m3

Comments

End of 92 volumes not compiled.

9600854

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL

WASTE STREAM

MWIR ID	
WIPP ID	RL-M021
Local ID	RL-TB-021
MATRIX CODE	
SITE FINAL FORM IDC	073

STREAM NAME TRU Mixed Inorganic Debris PCB's w/ Mercury

DESCRIPTION This waste stream was generated from the cleanup and maintenance activities of various process and support operations from the Plutonium Finishing Plant.

Waste Matrix Code Group: Uncategorized Metal

Site Matrix Description: This waste stream consists primarily of Inorganic Debris. Some of the containers contain organic debris (plastic, cellulosics). The hazardous constituents include PCB's and mercury.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	X
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000855

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL

RL-M021 CONTAINER: Standard Waste Box
Type/Size:

Container Mat'l: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type: bag
Liner Material: plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	175.9	60.7	268.6
Aluminum-Based Metals/Alloys	44.0	0.0	67.1
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	3.3	0.0	26.6
Rubber	0.0	0.0	0.0
Plastics	15.9	14.5	159.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

Comments

End of 92 volumes not compiled.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	66.6	66.6	m3
1994:	0.0	0.0	m3/yr
1995:	1.6	1.6	m3/yr
1996:	0.5	0.5	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	447.1	447.1	m3/yr

TYPICAL EPA CODES APPLICABLE

D006

D008

D009

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	2.82E-02	Curies/m3
Pu239	7.82E-01	Curies/m3
Pu240	1.76E-01	Curies/m3
Pu241	4.69E+00	Curies/m3
Pu242	1.02E-05	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL

WASTE STREAM MWIR ID		STREAM NAME	TRU Mixed Leaded Gloves/Aprons PCB's w/Mercury
WIPP ID	RL-M022		
Local ID	RL-TB-022	DESCRIPTION	This waste stream was generated from the cleanup and maintenance activities of various process and support operations from the Plutonlum Finishing Plant.
MATRIX CODE			
SITE FINAL FORM IDC	075		

Waste Matrix Code Group: Combustible

Site Matrix Description: This waste stream consists primarily of leaded gloves/aprons. Some of the containers contain inorganic debris (metal), organic debris (plastic) and hazardous constituents including PCB's and mercury.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	X
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

00857

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL

RL-M022

CONTAINER: Standard Waste Box
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type: bag
Liner Material: platic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	229.2	0.0	286.4
Aluminum-Based Metals/Alloys	57.3	0.0	286.4
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	39.0	39.0	39.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

Comments

End of 92 volumes not compiled.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	3.2	3.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.1	0.1	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	21.2	21.2	m3/yr

TYPICAL EPA CODES APPLICABLE

D006
D008
D009

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	3.86E-02	Curies/m3
Pu239	1.33E+00	Curies/m3
Pu240	2.98E-01	Curies/m3
Pu241	7.95E+00	Curies/m3
Pu242	1.73E-05	Curies/m3

0008513

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RL

WASTE STREAM MWIR ID		STREAM NAME	TRU Mixed RCRA Organic Debris with PCB's
WIPP ID	RL-M023	DESCRIPTION	This waste stream was generated from the cleanup and maintenance activities of various process and support operations from the Plutonium Finishing Plant
Local ID	RL-TB-023		
MATRIX CODE			
SITE FINAL FORM IDC	074		
Waste Matrix Code Group	Combustible		
Site Matrix Description	This waste stream consists primarily of Organic Debris contaminated with PCB's.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT:

TRUCON CODE:

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	X
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000853

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RL

RL-M023

CONTAINER: Drum
Type/Size: 55-gallon

Container Mat'l: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	13.1	13.1	13.1
Rubber	8.3	8.3	8.3
Plastics	64.3	64.3	64.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.4	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.3	0.3	m3/yr

TYPICAL EPA CODES APPLICABLE

D001

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	8.10E-03	Curies/m3
Pu239	2.78E-01	Curies/m3
Pu240	6.24E-02	Curies/m3
Pu241	1.67E+00	Curies/m3
Pu242	3.64E-06	Curies/m3

Comments

End of 92 volumes not compiled.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE RL

WASTE STREAM MWIR ID	
WIPP ID	RL-M024
Local ID	RL-TB-024
MATRIX CODE	
SITE FINAL FORM IDC	076
STREAM NAME	TRU Mixed Organic Labpacks w/PCBs
DESCRIPTION	This waste stream was generated from the cleanup and maintenance activities of various process and support operations from the Plutonium Finishing Plant.
Waste Matrix Code Group	Solidified Organics
Site Matrix Description	This waste stream consists primarily of Organic Labpacks. Some of the containers contain organic debris (plastic, rubber, cellulosics), and PCB's.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	X
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE RL

RL-M024

CONTAINER:	Drum	Container Matl:	steel	Liner Type:	rigid	Number Stored:	
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	HDPE	Number Projected:	

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	6.9	1.0	24.0
Rubber	0.4	0.4	0.4
Plastics	12.8	3.6	58.2
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.9	0.9	0.9
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	2.3	2.3	m3
1994:	0.4	0.4	m3/yr
1995:	5.2	5.2	m3/yr
1996:	2.1	2.1	m3/yr
1997:	0.6	0.6	m3/ry
1998-2002:	1.6	1.6	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D001

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	6.65E-04	Curies/m3
Pu239	2.29E-02	Curies/m3
Pu240	5.13E-03	Curies/m3
Pu241	1.37E-01	Curies/m3
Pu242	2.99E-07	Curies/m3

Comments

End of 92 volumes not compiled.

9806

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE PNL, KERR MCGEE

WASTE STREAM MWIR ID	
WIPP ID	RL-M031
Local ID	RL-TB-031
MATRIX CODE	
SITE FINAL FORM IDC	001
STREAM NAME	TRU Mixed Heterogeneous Debris (State Only)
DESCRIPTION	This waste stream was generated from the cleanup and maintenance activities of various research, process and support operations from Kerr McGee and the Pacific Northwest Laboratories.
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	This waste stream consists primarily of Heterogeneous Debris. The waste is hazardous by State regulation.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000863

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU HANDLING CH GENERATOR SITE PNL, KERR MCGEE

RL-M031

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	14.3	14.3	14.3
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.6	0.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.4	0.4	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	6.07E-03	Curies/m3
Pu239	3.17E-01	Curies/m3
Pu240	9.53E-02	Curies/m3
Pu241	1.38E+00	Curies/m3
Pu242	3.01E-06	Curies/m3

Comments

End of 92 volumes not compiled.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE PNL

WASTE STREAM MWIR ID	
WIPP ID	RL-M032
Local ID	RL-TB-032
MATRIX CODE	
SITE FINAL FORM IDC	071
STREAM NAME	TRU Mixed Inorganic Homogeneous Solids Met/Org
DESCRIPTION	This waste stream was generated from the cleanup and maintenance activities of various research, process and support operations from the Pacific Northwest Laboratories.
Waste Matrix Code Group	Solidified Inorganics
Site Matrix Description	This waste stream consists primarily of Inorganic Homogeneous Solids (absorbents). Some of the containers contain organic and metal hazardous constituents.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000865

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE PNL

RL-M032

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type: rigid
Liner Material: HDPE
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	77.5	77.5	77.5
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	98.2	98.2	98.2
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

End of 92 volumes not compiled.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.2	0.2	m3
1994:	0.2	0.2	m3/yr
1995:	0.2	0.2	m3/yr
1996:	0.3	0.3	m3/yr
1997:	0.2	0.2	m3/ry
1998-2002:	0.7	0.7	m3/yr
2003-2022:	1.4	1.4	m3/yr

TYPICAL EPA CODES APPLICABLE

D001
D002
D007
F003

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	3.43E-04	Curies/m3
Cs134	3.00E-04	Curies/m3
Pu239	6.22E-06	Curies/m3
Pu241	3.30E-01	Curies/m3
Sr90	1.12E-02	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL   WASTE TYPE MTRU   HANDLING RH   GENERATOR SITE RL

WASTE STREAM MWIR ID	
WIPP ID	RL-M201
Local ID	RL-TB-201
MATRIX CODE	5400
SITE FINAL FORM IDC	001
STREAM NAME	Projected RH-MTRU Waste
DESCRIPTION	The waste stream consists of projected mixed TRU waste from 1994 to 2022. By volume, much of the waste is a portion of the thermocouple assemblies, transfer pumps, mixing pumps, and other equipment that will be eventually removed from single-shell and double-shell tanks.
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	The waste includes failed and obsolete equipment or material including tanks, pumps, agitators, ovens, heaters, hoods, jumpers, and accessories. Some waste will contain wood, plastics, paper, rubber, and soils.

NO MIGRATION VARIANCE PETITION ASSIGNMENT   TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

SITE NAME RL   WASTE TYPE MTRU   HANDLING RH   Page RL-M201 - 2

RL-M201

CONTAINER:	RH Canister	Container Matl:	Steel	Liner Type:	
Type/Size:	RH Canister	Int. Vol/Ctnr:	0.89 m3	Liner Material:	

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	176.0	49.0	1052.0
Aluminum-Based Metals/Alloys	44.0	12.0	263.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	3.3	0.0	26.6
Rubber	0.0	0.0	0.0
Plastics	15.9	14.5	159.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	435.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	6.8	6.8	m3/ry
1998-2002:	4.0	4.0	m3/yr
2003-2022:	85.0	85.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239		Curies/m3
Pu240		Curies/m3
Sr90		Curies/m3
Y90		Curies/m3
Cs137		Curies/m3
Ba137m		Curies/m3

Comments

Activity for these radionuclides is unknown.

Footnotes

An additional 31,027 m3 of "suspect" mixed RH-TRU waste has been reported by Hanford in the data submittals. Sufficient information is currently unavailable on the processes that are anticipated to generate this waste to ascertain if this waste would be eligible for disposal in WIPP as RH-TRU. Additional information has been requested from Hanford to resolve this issue in Revision 2 of the WTWBIR.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE: TRU | HANDLING: CH | GENERATOR SITE: RL, PNL

WASTE STREAM MWIR ID	
WIPP ID	RL-T025
Local ID	RL-TB-025
MATRIX CODE	
SITE FINAL FORM IDC	073
STREAM NAME	Non-mixed TRU Inorganic Debris
DESCRIPTION	This waste stream was generated from the cleanup and maintenance activities of various research, process and support operations from the Pacific Northwest Laboratories and the Plutonium Finishing Plant.
Waste Matrix Code Group	Uncategorized Metal
Site Matrix Description	This waste stream consists primarily of Inorganic Debris. Some of the containers contain organic debris (plastic, rubber, cellulosics).

NO MIGRATION VARIANCE PETITION ASSIGNMENT:

TRUCON CODE:

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL   **WASTE TYPE** TRU   **HANDLING** CH   **GENERATOR SITE** RL, PNL

RL-T025

CONTAINER:	Standard Waste Box	**Container Matl:**	steel	**Liner Type:**	bag
Type/Size:		**Int. Vol/Ctnr:**	1.9 m3	**Liner Material:**	plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	66.6	12.7	915.3
Aluminum-Based Metals/Alloys	16.7	12.7	915.3
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	7.6	1.2	62.3
Rubber	0.7	0.7	0.7
Plastics	21.4	5.3	206.1
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	33.5	33.5	m3
1994:	5.7	5.7	m3/yr
1995:	10.2	10.2	m3/yr
1996:	23.8	23.8	m3/yr
1997:	6.2	6.2	m3/ry
1998-2002:	7.0	7.0	m3/yr
2003-2022:	36.4	36.4	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	5.76E-02	Curies/m3
Pu239	9.39E-01	Curies/m3
Pu240	2.45E-01	Curies/m3
Pu241	8.72E+00	Curies/m3
Pu242	5.00E-05	Curies/m3

Comments

End of 92 volumes not compiled.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL, PNL

WASTE STREAM MWIR ID		**STREAM NAME**	Non-mixed TRU Organic Debris
WIPP ID	RL-T026	**DESCRIPTION**	This waste stream was generated from the cleanup and maintenance activities of various research, process and support operations from the Pacific Northwest Laboratories and the Plutonium Finishing Plant.
Local ID	RL-TB-026		
MATRIX CODE			
SITE FINAL FORM IDC	074		
Waste Matrix Code Group	Combustible		
Site Matrix Description	This waste stream consists primarily of Organic Debris. Some of the containers contain inorganic debris (metal).		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

1708710

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL   WASTE TYPE TRU   HANDLING CH   GENERATOR SITE RL, PNL

RL-T026

CONTAINER: Standard Waste Box
Type/Size:
Container Matl: steel
Int. Vol/Ctnr: 1.9 m3
Liner Type: bag
Liner Material: plastic
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	47.5	45.8	689.1
Aluminum-Based Metals/Alloys	11.9	0.0	689.1
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	4.6	0.1	79.9
Rubber	2.3	0.1	106.5
Plastics	19.2	0.4	390.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	116.1	116.1	m3
1994:	19.7	19.7	m3/yr
1995:	35.5	35.5	m3/yr
1996:	82.7	82.7	m3/yr
1997:	21.5	21.5	m3/ry
1998-2002:	24.4	24.4	m3/yr
2003-2022:	126.4	126.4	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	3.33E-02	Curies/m3
Pu238	3.67E-02	Curies/m3
Pu239	5.05E-01	Curies/m3
Pu240	1.14E-01	Curies/m3
Pu241	3.35E+00	Curies/m3
Pu242	1.07E-05	Curies/m3

Comments

End of 92 volumes not compiled.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE PNL

WASTE STREAM

MWIR ID	
WIPP ID	RL-T027
Local ID	RL-TB-027
MATRIX CODE	
SITE FINAL FORM IDC	071

STREAM NAME: Non-mixed TRU Inorganic Homogeneous Solids

DESCRIPTION: This waste stream was generated from the cleanup and maintenance activities of various research, process and support operations from the Pacific Noirthwest Laboratories.

Waste Matrix Code Group: Solidified Inorganics

Site Matrix Description: This waste stream consts primarily of inorganic homogeneous solids. Some of the containers contain organic debris (plastic, rubber, cellulosics).

NO MIGRATION VARIANCE PETITION ASSIGNMENT:

TRUCON CODE:

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

0008723

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE PNL

RL-T027

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type: rigid
Liner Material: HDPE
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	27.0	4.8	153.9
Aluminum-Based Metals/Alloys	6.8	4.8	153.9
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	4.5	1.4	9.6
Rubber	5.0	1.6	11.1
Plastics	12.9	7.2	50.5
Solidified, Inorganic matrix	72.0	72.0	192.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	1.3	1.3	m3
1994:	66.2	66.2	m3/yr
1995:	130.7	130.7	m3/yr
1996:	147.4	147.4	m3/yr
1997:	72.2	72.2	m3/ry
1998-2002:	65.0	65.0	m3/yr
2003-2022:	107.5	107.5	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	9.33E-02	Curies/m3
Co60	1.00E-03	Curies/m3
Cs137	5.00E-03	Curies/m3
Pu238	5.53E-02	Curies/m3
Pu239	1.04E+00	Curies/m3
Pu240	2.47E-01	Curies/m3
Pu241	5.36E+00	Curies/m3
Pu242	1.91E-05	Curies/m3
Ra226	3.17E-01	Curies/m3

Comments

End of 92 volumes not compiled.

1-18000

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL, PNL

WASTE STREAM MWIR ID	
WIPP ID	RL-T028
Local ID	RL-TB-028
MATRIX CODE	
SITE FINAL FORM IDC	072
Waste Matrix Code Group	Soils
Site Matrix Description	This waste stream consts primarily of soils. Some of the containers contain organic debris (plastic, rubber, cellulosics).
STREAM NAME	Non-mixed TRU Soils
DESCRIPTION	This waste stream was generated from the cleanup and maintenance activities of various research, process and support operations from the Pacific Northwest Laboratories and the Plutonium Finishing Plant.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000875

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL   WASTE TYPE TRU   HANDLING CH   GENERATOR SITE RL, PNL

RL-T028   CONTAINER: Drum   Type/Size: 55-gallon

Container Matl: steel   Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid   Liner Material: HDPE

Number Stored: Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	10.3	4.8	26.4
Rubber	1.6	1.6	1.6
Plastics	93.7	19.2	132.2
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	431.0	98.6	603.4
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.6	0.6	m3
1994:	0.7	0.7	m3/yr
1995:	67.1	67.1	m3/yr
1996:	18.0	18.0	m3/yr
1997:	0.2	0.2	m3/ry
1998-2002:	36.7	36.7	m3/yr
2003-2022:	0.1	0.1	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	6.53E-03	Curies/m3
Pu239	2.24E-01	Curies/m3
Pu240	5.04E-02	Curies/m3
Pu241	1.35E+00	Curies/m3
Pu242	2.93E-06	Curies/m3

Comments

End of 92 volumes not compiled.

9780000

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL, PNL

WASTE STREAM MWIR ID		**STREAM NAME**	Non-mixed Organic Debris
WIPP ID	RL-T029	**DESCRIPTION**	This waste stream was generated from the cleanup and maintenance activities of various research, process and support operations from the Pacific Northwest Laboratories and the Plutonium Finishing Plant.
Local ID	RL-TB-029		
MATRIX CODE			
SITE FINAL FORM IDC	074		
Waste Matrix Code Group	Combustible		
Site Matrix Description	This waste stream consists primarily of Organic Debris. Some of the containers contain inorganic debris (metal) and soil.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

0008774

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL, PNL

RL-T029

CONTAINER: Drum | Type/Size: 55-gallon

Container Matl: steel | Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid | Liner Material: HDPE

Number Stored: | Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	17.2	0.9	519.7
Aluminum-Based Metals/Alloys	4.3	0.9	519.7
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	27.2	0.0	480.8
Rubber	11.2	0.0	139.5
Plastics	28.2	1.8	456.1
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	7.1	0.4	192.7
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

End of 92 volumes not compiled.

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	367.7	367.7	m3
1994:	62.7	62.7	m3/yr
1995:	112.8	112.8	m3/yr
1996:	262.6	262.6	m3/yr
1997:	68.2	68.2	m3/ry
1998-2002:	77.5	77.5	m3/yr
2003-2022:	401.5	401.5	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.10E-01	Curies/m3
Cm244	1.60E-01	Curies/m3
Cs137	1.00E-04	Curies/m3
Np237	7.12E-06	Curies/m3
Pu238	1.65E-01	Curies/m3
Pu239	4.98E+00	Curies/m3
Pu240	1.13E+00	Curies/m3
Pu241	3.11E+01	Curies/m3
Pu242	8.30E-05	Curies/m3
Th232	2.98E-08	Curies/m3
U234	8.20E-06	Curies/m3
U235	2.04E-06	Curies/m3
U238	7.63E-06	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

WASTE STREAM MWIR ID	
WIPP ID	RL-T030
Local ID	RL-TB-030
MATRIX CODE	
SITE FINAL FORM IDC	073
STREAM NAME	Non-mixed Inorganic Debris with PCBs
DESCRIPTION	This waste stream was generated from the cleanup and maintenance activities of various process and support operations from the Plutonium Finishing Plant.
Waste Matrix Code Group	Uncategorized Metal
Site Matrix Description	This waste stream consists primarily of Inorganic Debris. Some of the containers contain organic debris (plastic, cellulosics), soils, and PCB's.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	X
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000879

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T030

CONTAINER:	Drum	Container Matl:	steel	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	209.5	0.0	261.9
Aluminum-Based Metals/Alloys	52.4	0.0	261.9
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	23.8	23.8	23.8
Rubber	0.0	0.0	0.0
Plastics	52.4	52.4	52.4
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	9.5	9.5	9.5
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.2	0.2	m3
1994:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.1	0.1	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.62E-04	Curies/m3
Pu239	5.57E-03	Curies/m3
Pu240	1.25E-03	Curies/m3
Pu241	3.34E-02	Curies/m3
Pu242	7.29E-08	Curies/m3

Comments

End of 92 volumes not compiled.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

WASTE STREAM MWIR ID	
WIPP ID	RL-T101
Local ID	RL-TB-101
MATRIX CODE	5400
SITE FINAL FORM IDC	
STREAM NAME	202 A Bldg TRU Waste
DESCRIPTION	This waste stream consists of contact-handled TRU waste from the Fuel Reprocessing Plant using the Plutonium/Uranium Solvent Extraction Process.
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT:

TRUCON CODE:

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000881

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

RL-T101

CONTAINER: Standard Waste Box
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type: bag
Liner Material: plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	140.0	140.0	m3
End of 1993:	140.0	140.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	4.91E-02	Curies/m3
Pu239	1.93E+00	Curies/m3
Pu240	4.33E-01	Curies/m3
Pu241	4.87E+00	Curies/m3
Pu242	2.52E-05	Curies/m3
Am241	2.20E-01	Curies/m3
Sr90	1.07E-02	Curies/m3
Cs137	1.16E-02	Curies/m3
Y90	1.07E-02	Curies/m3
Ba137m	1.10E-02	Curies/m3
U-nat	1.88E-12	Curies/m3

Comments

Upper and lower weights of final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T101

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type: rigid
Liner Material: HDPE
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	230.0	310.0	m3
End of 1993:	230.0	310.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	3.61E-02	Curies/m3
Pu239	1.42E+00	Curies/m3
Pu240	3.19E-01	Curies/m3
Pu241	3.59E+00	Curies/m3
Pu242	1.86E-05	Curies/m3
Am241	1.62E-01	Curies/m3
Sr90	7.90E-03	Curies/m3
Cs137	8.55E-03	Curies/m3
Y90	7.90E-03	Curies/m3
Ba137m	8.09E-03	Curies/m3
U-nat	1.38E-12	Curies/m3

Comments

Upper and lower weights of final waste form are unknown.

000883

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

WASTE STREAM

MWIR ID

WIPP ID RL-T102

Local ID RL-TB-102

MATRIX CODE 5400

SITE FINAL FORM IDC

STREAM NAME 202-AL Bldg TRU Waste

DESCRIPTION This waste stream consists of contact-handled TRU waste from the laboratory at the Fuel Reprocessing Plant.

Waste Matrix Code Group Heterogeneous

Site Matrix Description Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

1488003

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU   HANDLING CH   GENERATOR SITE RL

RL-T102

CONTAINER: Standard Waste Box
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type: bag
Liner Material: plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	2.5	2.5	m3
End of 1993:	2.5	2.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	8.50E-06	Curies/m3
Pu239	3.34E-04	Curies/m3
Pu240	7.50E-05	Curies/m3
Pu241	8.43E-04	Curies/m3
Pu242	4.37E-09	Curies/m3
Am241	3.81E-05	Curies/m3
Sr90	4.60E-02	Curies/m3
Cs137	4.92E-02	Curies/m3
Y90	4.60E-02	Curies/m3
Ba137m	4.65E-02	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T102

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type: rigid
Liner Material: HDPE
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	154.0	208.0	m3
End of 1993:	154.0	208.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	4.90E-06	Curies/m3
Pu239	1.92E-04	Curies/m3
Pu240	4.32E-05	Curies/m3
Pu241	4.85E-04	Curies/m3
Pu242	2.53E-09	Curies/m3
Am241	2.19E-05	Curies/m3
Sr90	2.65E-02	Curies/m3
Cs137	2.83E-02	Curies/m3
Y90	2.65E-02	Curies/m3
Ba137m	2.68E-02	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

WASTE STREAM

MWIR ID

WIPP ID RL-T103

Local ID RL-TB-103

MATRIX CODE 4200

SITE FINAL FORM IDC

STREAM NAME 216-Z-9 Retrieved Soil

DESCRIPTION This waste stream consists of TRU waste from the retrieved contaminated soil from the 216-Z-9 Trench. Soil is contaminated by TRU liquid waste.

Waste Matrix Code Group Soils

Site Matrix Description Waste consists of soil contaminated with TRU solutions. Soil is contained in a 0.3 mm polyethylene bag within an inner container. The outer container is a standard 55-gallon drum. Vermiculite is a packing material between the inner and outer container.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

RL-T103

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	324.0	162.0	324.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	285.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	73.5	99.2	m3
End of 1993:	73.5	99.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu242	4.57E-04	Curies/m3
Am241	3.98E+00	Curies/m3
Pu238	8.89E-01	Curies/m3
Pu239	3.49E+01	Curies/m3
Pu240	7.85E+00	Curies/m3
Pu241	8.82E+01	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

WASTE STREAM

MWIR ID

WIPP ID RL-T104

Local ID RL-TB-104

MATRIX CODE 5400

SITE FINAL FORM IDC

STREAM NAME 221-T TRU Waste

DESCRIPTION This waste stream consists of TRU waste from the T Plant Fuel Reprocessing Plant.

Waste Matrix Code Group Heterogeneous

Site Matrix Description Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL   WASTE TYPE TRU   HANDLING CH   GENERATOR SITE RL

RL-T104   CONTAINER: Drum   Type/Size: 55-gallon   Container Matl: steel   Int. Vol/Ctnr: 0.208 m3   Liner Type: rigid   Liner Material: HDPE   Number Stored: Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3.7	5.0	m3
End of 1993:	3.7	5.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	9.03E-05	Curies/m3
Pu239	3.55E-03	Curies/m3
Pu240	7.97E-04	Curies/m3
Pu241	8.95E-03	Curies/m3
Pu242	4.64E-08	Curies/m3
Am241	4.04E-04	Curies/m3
Sr90	7.69E-05	Curies/m3
Cs137	8.21E-05	Curies/m3
Y90	7.69E-05	Curies/m3
Ba137m	7.77E-05	Curies/m3
U-nat	1.96E-08	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

WASTE STREAM MWIR ID		STREAM NAME	222-S TRU Waste
WIPP ID	RL-T105		
Local ID	RL-TB-105	DESCRIPTION	This waste stream consists of TRU waste from the Chemical Separation Areas Operations Laboratory.
MATRIX CODE	5400		
SITE FINAL FORM IDC			

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T105

CONTAINER: Standard waste box
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type: bag
Liner Material: plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	22.1	22.1	m3
End of 1993:	22.1	22.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	2.12E-03	Curies/m3
Pu239	8.31E-02	Curies/m3
Pu240	1.87E-02	Curies/m3
Pu241	2.10E-01	Curies/m3
Pu242	1.09E-06	Curies/m3
Am241	9.47E-03	Curies/m3
Sr90	5.12E-03	Curies/m3
Cs137	5.49E-03	Curies/m3
Y90	5.12E-03	Curies/m3
Ba137m	5.19E-03	Curies/m3
U-dep	2.30E-07	Curies/m3
U-enr	8.24E-08	Curies/m3
U-nat	2.64E-09	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T105

CONTAINER:	Drum	Container Matl:	steel	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	HDPE

Number Stored:

Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	30.7	41.4	m3
End of 1993:	30.7	41.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.56E-03	Curies/m3
Pu239	6.12E-02	Curies/m3
Pu240	1.37E-02	Curies/m3
Pu241	1.54E-01	Curies/m3
Pu242	8.00E-07	Curies/m3
Am241	6.97E-03	Curies/m3
Sr90	3.77E-03	Curies/m3
Cs137	4.04E-03	Curies/m3
Y90	3.77E-03	Curies/m3
Ba137m	3.82E-03	Curies/m3
U-del	1.69E-07	Curies/m3
U-enr	6.07E-08	Curies/m3
U-nat	1.94E-09	Curies/m3

000893

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

WASTE STREAM

MWIR ID:

WIPP ID: RL-T106

Local ID: RL-TB-106

MATRIX CODE: 5400

SITE FINAL FORM IDC:

STREAM NAME: 233-S TRU Waste

DESCRIPTION: This waste stream consists of TRU waste from the REDOX Fuel Reprocessing Facility.

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.

NO MIGRATION VARIANCE PETITION ASSIGNMENT:

TRUCON CODE:

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

00894

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T106

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	6.0	8.1	m3
End of 1993:	6.0	8.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.20E-02	Curies/m3
Pu239	4.70E-01	Curies/m3
Pu240	1.06E-01	Curies/m3
Pu241	1.19E+00	Curies/m3
Pu242	6.15E-06	Curies/m3
Am241	5.36E-02	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

0800.1

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

WASTE STREAM MWIR ID		STREAM NAME	234-5Z TRU Waste
WIPP ID	RL-T107		
Local ID	RL-TB-107	DESCRIPTION	This waste stream consists of TRU waste from the Plutonium Finishing Plant.
MATRIX CODE	5400		
SITE FINAL FORM IDC			

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT:

TRUCON CODE:

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T107

CONTAINER: Standard waste box
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type: bag
Liner Material: plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1690.0	1690.0	m3
End of 1993:	1690.0	1690.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	5.43E-02	Curies/m3
Pu239	2.13E+00	Curies/m3
Pu240	4.79E-01	Curies/m3
Pu241	5.38E+00	Curies/m3
Pu242	2.79E-05	Curies/m3
Am241	2.43E-01	Curies/m3
Sr90	1.37E-02	Curies/m3
Cs137	1.49E-02	Curies/m3
Y90	1.37E-02	Curies/m3
Ba137m	1.41E-02	Curies/m3
U-dep	2.07E-06	Curies/m3
U-enr	9.69E-07	Curies/m3
U-nat	2.37E-08	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T107

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type: rigid
Liner Material: HDPE
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1890.0	2560.0	m3
End of 1993:	1890.0	2560.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	4.04E-02	Curies/m3
Pu239	1.59E+00	Curies/m3
Pu240	3.57E-01	Curies/m3
Pu241	4.01E+00	Curies/m3
Pu242	2.08E-05	Curies/m3
Am241	1.81E-01	Curies/m3
Sr90	1.02E-02	Curies/m3
Cs137	1.11E-02	Curies/m3
Y90	1.02E-02	Curies/m3
Ba137m	1.05E-02	Curies/m3
U-dep	1.54E-06	Curies/m3
U-enr	7.22E-07	Curies/m3
U-nat	1.76E-08	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

000898

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

WASTE STREAM MWIR ID		STREAM NAME	Misc 200 West Area TRU Waste
WIPP ID	RL-T108		
Local ID	RL-TB-108	DESCRIPTION	This waste stream consists of TRU waste from the 200 Area Waste Tank Farms and other miscellaneous sources in the Chemical Separations Area.
MATRIX CODE	5400		
SITE FINAL FORM IDC			

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

0080090

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T108

CONTAINER:	Drum	Container Matl:	steel	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	21.0	28.3	m3
End of 1993:	21.0	28.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	4.98E-03	Curies/m3
Pu239	1.96E-01	Curies/m3
Pu240	4.40E-02	Curies/m3
Pu241	4.94E-01	Curies/m3
Pu242	2.56E-06	Curies/m3
Am241	2.23E-02	Curies/m3
Sr90	1.86E-03	Curies/m3
Cs137	1.99E-03	Curies/m3
Y90	1.86E-03	Curies/m3
Ba137m	1.88E-03	Curies/m3
U-nat	7.39E-08	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU   HANDLING CH   GENERATOR SITE RL

WASTE STREAM	MWIR ID		STREAM NAME: 308 Bldg TRU Waste
	WIPP ID	RL-T109	
	Local ID	RL-TB-109	DESCRIPTION: This waste stream consists of TRU waste from the Fuels Development Laboratory.
MATRIX CODE		5400	
SITE FINAL FORM IDC			

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000901

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

RL-T109 CONTAINER: Standard waste box Type/Size:

Container Matl: steel Int. Vol/Ctnr: 1.9 m3

Liner Type: bag Liner Material: plastic

Number Stored: Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	6.5	6.5	m3
End of 1993:	6.5	6.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	3.48E-03	Curies/m3
Pu239	1.37E-01	Curies/m3
Pu240	3.07E-02	Curies/m3
Pu241	3.45E-01	Curies/m3
Pu242	1.79E-06	Curies/m3
Am241	1.56E-02	Curies/m3
Sr90	3.94E-03	Curies/m3
Cs137	4.30E-03	Curies/m3
Y90	3.94E-03	Curies/m3
Ba137m	4.06E-03	Curies/m3
U-dep	1.21E-02	Curies/m3
U-enr	3.11E-04	Curies/m3
U-nat	3.76E-03	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T109

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type: rigid
Liner Material: HDPE
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	6.6	8.9	m3
End of 1993:	6.6	8.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	2.57E-03	Curies/m3
Pu239	1.01E-01	Curies/m3
Pu240	2.27E-02	Curies/m3
Pu241	2.55E-01	Curies/m3
Pu242	1.32E-06	Curies/m3
Am241	1.15E-02	Curies/m3
Sr90	2.91E-03	Curies/m3
Cs137	3.17E-03	Curies/m3
Y90	2.91E-03	Curies/m3
Ba137m	2.99E-03	Curies/m3
U-dep	8.90E-03	Curies/m3
U-enr	2.29E-04	Curies/m3
U-nat	2.77E-03	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

WASTE STREAM

MWIR ID

WIPP ID RL-T110

Local ID RL-TB-110

MATRIX CODE 5400

SITE FINAL FORM IDC

STREAM NAME 324 and 325 Bldg Oper TRU Waste

DESCRIPTION This waste stream consists of contact-handled TRU waste from the Chemical Materials Engineering Laboratory. A volume of 1.74E+1 m3 generated in 1984 is radioactive sources.

Waste Matrix Code Group Heterogeneous

Site Matrix Description Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms. The waste consists of irradiated fuel from R&D activities, both in complete assemblies or pins of irradiated fuel; and irradiated fuel fragments and resultant waste generated from irradiated fuel experiments and/or examinations, such as polishing residue, cutting fluids, absorbents, and metal fines.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T110

CONTAINER: Standard waste box
Type/Size:
Container Matl: steel
Int. Vol/Ctnr: 1.9 m3
Liner Type: bag
Liner Material: plastic
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	83.9	83.9	m3
End of 1993:	83.9	83.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	8.64E-02	Curies/m3
Pu239	3.39E+00	Curies/m3
Pu240	7.62E-01	Curies/m3
Pu241	8.57E+00	Curies/m3
Pu242	4.44E-05	Curies/m3
Am241	3.87E-01	Curies/m3
Sr90	5.21E-01	Curies/m3
Cs137	5.63E-01	Curies/m3
Y90	5.21E-01	Curies/m3
Ba137m	5.33E-01	Curies/m3
U-dep	3.27E-03	Curies/m3
U-enr	1.02E-03	Curies/m3
U-nat	8.52E-04	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

509000

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T110

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	236.0	319.0	m3
End of 1993:	236.0	319.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	6.47E-02	Curies/m3
Pu239	2.54E+00	Curies/m3
Pu240	5.71E-01	Curies/m3
Pu241	6.42E+00	Curies/m3
Pu242	3.33E-05	Curies/m3
Am241	2.90E-01	Curies/m3
Sr90	3.90E-01	Curies/m3
Cs137	4.22E-01	Curies/m3
Y90	3.90E-01	Curies/m3
Ba137m	3.99E-01	Curies/m3
U-dep	2.45E-03	Curies/m3
U-enr	7.66E-04	Curies/m3
U-nat	6.39E-04	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

WASTE STREAM MWIR ID	
WIPP ID	RL-T111A
Local ID	RL-TB-111A
MATRIX CODE	5400
SITE FINAL FORM IDC	
STREAM NAME	325B and 327 Bldg Oper TRU Waste
DESCRIPTION	This waste stream (RL-T111A and RL-T111B) consists of typically remote-handled TRU waste from the Shielded Laboratory Annex of the Radiochemistry Building and Post Irradiation Test Laboratory. A volume of 21.1 m3 generated in 1971 is contact-handled waste.
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	Typically, 70 to 80% of waste presently in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. The waste presently in boxes typically consists of whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T111A

CONTAINER:	Standard waste box	Container Matl:	steel	Liner Type:	bag
Type/Size:		Int. Vol/Ctnr:	1.9 m3	Liner Material:	plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	10.6	10.6	m3
End of 1993:	10.6	10.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	3.94E+00	Curies/m3
Pu239	2.47E+01	Curies/m3
Pu240	1.23E+01	Curies/m3
Pu241	7.73E+02	Curies/m3
Pu242	3.52E-04	Curies/m3
Am241	3.11E-07	Curies/m3
Sr90	1.37E+02	Curies/m3
Cs137	1.47E+02	Curies/m3
Y90	1.37E+02	Curies/m3
Ba137m	1.39E+02	Curies/m3
U-dep	6.32E-03	Curies/m3
U-enr	1.02E-01	Curies/m3
U-nat	1.15E-04	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU **HANDLING** RH **GENERATOR SITE** RL

WASTE STREAM MWIR ID		**STREAM NAME**	325B and 327 Bldg Oper TRU Waste
WIPP ID	RL-T111B	**DESCRIPTION**	This waste stream (RL-T111A and RL-T111B) consists of typically remote-handled TRU waste from the Shielded Laboratory Annex of the Radiochemistry Building and Post Irradiation Test Laboratory. A volume of 21.1 m3 generated in 1971 is contact-handled waste (ref. RL-T111A).
Local ID	RL-TB-111B		
MATRIX CODE	5400		
SITE FINAL FORM IDC	001		

Waste Matrix Code Group Heterogeneous

Site Matrix Description Typically, 70 to 80% of waste presently in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. The waste presently in boxes typically consists of whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING RH GENERATOR SITE RL

RL-T111B

CONTAINER Type/Size: RH Canister (for drum waste)

Container Matl: Steel

Int. Vol/Ctnr: 0.89 m3

Liner Type:

Liner Material:

Number Stored:

Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	527.0		
Packaging Material, Plastic	26.0		

STORED TRU WASTE - ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.2	m3
End of 1993:	0.2	0.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.83E+00	Curies/m3
Pu239	1.15E+01	Curies/m3
Pu240	1.15E+01	Curies/m3
Pu241	3.60E+02	Curies/m3
Pu242	1.64E-04	Curies/m3
Am241	1.45E-07	Curies/m3
Sr90	6.38E+01	Curies/m3
Cs137	6.82E+01	Curies/m3
Y90	6.38E+01	Curies/m3
Ba137m	6.45E+01	Curies/m3
U-dep	2.94E-03	Curies/m3
U-enr	4.76E-02	Curies/m3
U-nat	5.35E-05	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

WASTE STREAM MWIR ID

WIPP ID RL-T112

Local ID RL-TB-112

MATRIX CODE 5400

SITE FINAL FORM IDC

STREAM NAME 340 Bldg Oper and R&D TRU Waste

DESCRIPTION This waste stream consists of TRU waste from the Retention and Neutralization Facility.

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

00191

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE: TRU | HANDLING: CH | GENERATOR SITE: RL

RL-T112

CONTAINER:	Standard waste box	Container Matl:	steel	Liner Type:	bag
Type/Size:		Int. Vol/Ctnr:	1.9 m3	Liner Material:	plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	51.5	51.5	m3
End of 1993:	51.5	51.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	4.74E-02	Curies/m3
Pu239	1.86E+00	Curies/m3
Pu240	4.18E-01	Curies/m3
Pu241	4.70E+00	Curies/m3
Pu242	2.44E-05	Curies/m3
Am241	2.12E-01	Curies/m3
Sr90	1.21E-01	Curies/m3
Cs137	1.29E-01	Curies/m3
Y90	1.21E-01	Curies/m3
Ba137m	1.22E-02	Curies/m3
U-dep	5.57E-03	Curies/m3
U-enr	1.12E-02	Curies/m3
U-nat	1.84E-04	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T112

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type: rigid
Liner Material: HDPE
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	37.0	49.9	m3
End of 1993:	37.0	49.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	3.54E-02	Curies/m3
Pu239	1.39E+00	Curies/m3
Pu240	3.13E-01	Curies/m3
Pu241	3.51E+00	Curies/m3
Pu242	1.82E-05	Curies/m3
Am241	1.59E-01	Curies/m3
Sr90	9.02E-02	Curies/m3
Cs137	9.64E-02	Curies/m3
Y90	9.02E-02	Curies/m3
Ba137m	9.12E-02	Curies/m3
U-dep	4.17E-03	Curies/m3
U-enr	8.35E-03	Curies/m3
U-nat	1.38E-04	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

WASTE STREAM MWIR ID		STREAM NAME	100 Areas and 200 Areas R&D TRU Waste
WIPP ID	RL-T113		
Local ID	RL-TB-113	DESCRIPTION	This waste stream consists of TRU waste from the Biological Laboratory and other R&D Sources in the Reactor and Chemical Separation Areas.
MATRIX CODE	5400		
SITE FINAL FORM IDC			

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT:

TRUCON CODE:

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000914

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE: TRU | HANDLING: CH | GENERATOR SITE: RL

RL-T113

CONTAINER: Standard waste box
Type/Size:
Container Matl: steel
Int. Vol/Ctnr: 1.9 m3
Liner Type: bag
Liner Material: plastic
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	12.8	12.8	m3
End of 1993:	12.8	12.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	5.48E-04	Curies/m3
Pu239	2.15E-02	Curies/m3
Pu240	4.84E-03	Curies/m3
Pu241	5.44E-02	Curies/m3
Pu242	2.82E-07	Curies/m3
Am241	2.45E-03	Curies/m3
Sr90	5.23E-04	Curies/m3
Cs137	5.58E-04	Curies/m3
Y90	5.23E-04	Curies/m3
Ba137m	5.28E-04	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

RL-T113

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	13.4	18.2	m3
End of 1993:	13.4	18.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	4.02E-04	Curies/m3
Pu239	1.58E-02	Curies/m3
Pu240	3.55E-03	Curies/m3
Pu241	3.98E-02	Curies/m3
Pu242	2.07E-07	Curies/m3
Am241	1.80E-03	Curies/m3
Sr90	3.83E-04	Curies/m3
Cs137	4.09E-04	Curies/m3
Y90	3.83E-04	Curies/m3
Ba137m	3.87E-04	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

9160000

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

WASTE STREAM MWIR ID	
WIPP ID	RL-T114
Local ID	RL-TB-114
MATRIX CODE	5400
SITE FINAL FORM IDC	
STREAM NAME	209 E Bldg TRU Waste
DESCRIPTION	This waste stream consists of TRU waste from the Critical Mass Laboratory.
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT | **TRUCON CODE**

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000917

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL   **WASTE TYPE** TRU   **HANDLING** CH   **GENERATOR SITE** RL

RL-T114

CONTAINER: Standard waste box
Type/Size:
Container Matl: steel
Int. Vol/Ctnr: 1.9 m3
Liner Type: bag
Liner Material: plastic
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.7	1.7	m3
End of 1993:	1.7	1.7	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.24E-01	Curies/m3
Pu239	4.86E+00	Curies/m3
Pu240	9.93E+00	Curies/m3
Pu241	1.23E+01	Curies/m3
Pu242	6.36E-05	Curies/m3
Am241	5.54E-01	Curies/m3
Sr90	2.55E-02	Curies/m3
Cs137	2.78E-02	Curies/m3
Y90	2.55E-02	Curies/m3
Ba137m	2.63E-02	Curies/m3
U-nat	4.46E-08	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

000318

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T114

CONTAINER:	Drum	Container Matl:	steel	Liner Type:	rigid	Number Stored:	
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	HDPE	Number Projected:	

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	13.4	18.1	m3
End of 1993:	13.4	18.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	9.44E-02	Curies/m3
Pu239	3.71E+00	Curies/m3
Pu240	8.33E-01	Curies/m3
Pu241	9.36E+00	Curies/m3
Pu242	4.85E-05	Curies/m3
Am241	4.23E-01	Curies/m3
Sr90	1.94E-02	Curies/m3
Cs137	2.12E-02	Curies/m3
Y90	1.94E-02	Curies/m3
Ba137m	2.00E-02	Curies/m3
U-nat	3.40E-08	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

000919

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

WASTE STREAM MWIR ID		**STREAM NAME**	231-Z Bldg TRU Waste
WIPP ID	RL-T115		
Local ID	RL-TB-115	**DESCRIPTION**	This waste stream consists of TRU waste from the Materials Engineering Laboratory.
MATRIX CODE	5400		
SITE FINAL FORM IDC			

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT | **TRUCON CODE**

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

0000920

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

RL-T115

CONTAINER: Standard waste box
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type: bag
Liner Material: plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	480.0	480.0	m3
End of 1993:	480.0	480.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.38E-02	Curies/m3
Pu239	5.41E-01	Curies/m3
Pu240	1.21E-01	Curies/m3
Pu241	1.37E+00	Curies/m3
Pu242	7.08E+06	Curies/m3
Am241	6.17E-02	Curies/m3
Sr90	1.09E-03	Curies/m3
Cs137	1.17E-03	Curies/m3
Y90	1.09E-03	Curies/m3
Ba137m	1.10E-03	Curies/m3
U-dep	2.13E-03	Curies/m3
U-enr	3.67E-06	Curies/m3
U-nat	1.09E-06	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

RL-T115

CONTAINER: Drum Type/Size: 55-gallon
Container Mat'l: steel Int. Vol/Ctnr: 0.208 m3
Liner Type: rigid Liner Material: HDPE
Number Stored: Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	171.0	230.0	m3
End of 1993:	171.0	230.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.01E-02	Curies/m3
Pu239	3.96E-01	Curies/m3
Pu240	8.89E-02	Curies/m3
Pu241	1.00E+00	Curies/m3
Pu242	5.18E-06	Curies/m3
Am241	4.51E-02	Curies/m3
Sr90	7.99E-04	Curies/m3
Cs137	8.53E-04	Curies/m3
Y90	7.99E-04	Curies/m3
Ba137m	8.07E-04	Curies/m3
U-dep	1.56E-03	Curies/m3
U-enr	2.69E-06	Curies/m3
U-nat	8.01E-07	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

WASTE STREAM MWIR ID		**STREAM NAME**	303-C Bldg TRU Waste
WIPP ID	RL-T116		
Local ID	RL-TB-116	**DESCRIPTION**	This waste stream consists of TRU waste from the Material Evaluation Laboratory.
MATRIX CODE	5400		
SITE FINAL FORM IDC			

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT: | TRUCON CODE:

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000923

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T116

CONTAINER: Standard waste box
Type/Size:
Container Matl: steel
Int. Vol/Ctnr: 1.9 m3
Liner Type: bag
Liner Material: plastic
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.8	1.8	m3
End of 1993:	1.8	1.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	3.51E-01	Curies/m3
Pu239	1.38E+01	Curies/m3
Pu240	3.10E+00	Curies/m3
Pu241	3.48E+01	Curies/m3
Pu242	1.81E-04	Curies/m3
Am241	1.57E+00	Curies/m3
Sr90	2.01E+00	Curies/m3
Cs137	2.14E+00	Curies/m3
Y90	2.01E+00	Curies/m3
Ba137m	2.02E+00	Curies/m3
U-enr	1.12E-02	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

RL-T116

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	6.6	8.9	m3
End of 1993:	6.6	8.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	2.60E-01	Curies/m3
Pu239	1.02E+01	Curies/m3
Pu240	2.30E+00	Curies/m3
Pu241	2.58E+01	Curies/m3
Pu242	1.34E-04	Curies/m3
Am241	1.17E+00	Curies/m3
Sr90	1.49E+00	Curies/m3
Cs137	1.58E+00	Curies/m3
Y90	1.49E+00	Curies/m3
Ba137m	1.50E+00	Curies/m3
U-enr	8.33E-03	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

WASTE STREAM	MWIR ID		
	WIPP ID	RL-T117	
	Local ID	RL-TB-117	
MATRIX CODE		5400	
SITE FINAL FORM IDC			

STREAM NAME: 318 Bldg TRU Waste

DESCRIPTION: This waste stream consists of TRU waste from the Radiological Calibration Laboratory.

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.

NO MIGRATION VARIANCE PETITION ASSIGNMENT:

TRUCON CODE:

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000926

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL   WASTE TYPE TRU   HANDLING CH   GENERATOR SITE RL

RL-T117

CONTAINER:	Drum	Container Mat'l:	steel	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	HDPE

Number Stored:

Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.1	0.1	m3
End of 1993:	0.1	0.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Sr90	8.27E-02	Curies/m3
Cs137	9.01E-02	Curies/m3
Y90	8.27E-02	Curies/m3
Ba137m	8.53E-02	Curies/m3
U-dep	6.06E-04	Curies/m3
U-enr	2.17E-04	Curies/m3
U-nat	6.94E-06	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.
Waste stream has been identified as TRU waste but its isotopic composition is incomplete.

000927

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **RL** | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

WASTE STREAM

MWIR ID	
WIPP ID	RL-T118
Local ID	RL-TB-118
MATRIX CODE	5400
SITE FINAL FORM IDC	

STREAM NAME 300 Area RD TRU Waste

DESCRIPTION This waste stream consists of contact-handled TRU waste from the Chemical Engineering Building and Radiochemistry Building Laboratory and Hot Cells, and Radiochemistry Building Cesium Recovery, and Radioanalytic Laboratory. A volume of 3.19 m3 generated in 1984 is radioactive sources, stored in trenches.

Waste Matrix Code Group Heterogeneous

Site Matrix Description Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms. The waste consists of irradiated fuel from R&D activities, both in complete assemblies or pins of irradiated fuel; and irradiated fuel fragments and resultant waste generated from irradiated fuel experiments and/or examinations, such as polishing residue, cutting fluids, absorbents, and metal fines.

NO MIGRATION VARIANCE PETITION ASSIGNMENT | **TRUCON CODE**

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T118

CONTAINER:	Standard waste box	Container Matl:	steel	Liner Type:	bag
Type/Size:		Int. Vol/Ctnr:	1.9 m3	Liner Material:	plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	48.5	48.5	m3
End of 1993:	48.5	48.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.29E-02	Curies/m3
Pu239	5.08E-01	Curies/m3
Pu240	1.14E-01	Curies/m3
Pu241	1.28E+00	Curies/m3
Pu242	6.64E-06	Curies/m3
Am241	5.78E-02	Curies/m3
Sr90	3.43E-01	Curies/m3
Cs137	3.59E-01	Curies/m3
Y90	3.43E-01	Curies/m3
Ba137m	3.40E-01	Curies/m3
U-dep	2.67E-04	Curies/m3
U-enr	8.60E-04	Curies/m3
U-nat	1.59E-05	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T118

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	205.0	276.0	m3
End of 1993:	205.0	276.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	9.67E-03	Curies/m3
Pu239	3.79E-01	Curies/m3
Pu240	8.52E-02	Curies/m3
Pu241	9.60E-01	Curies/m3
Pu242	4.96E-06	Curies/m3
Am241	4.32E-02	Curies/m3
Sr90	2.56E-01	Curies/m3
Cs137	2.68E-01	Curies/m3
Y90	2.56E-01	Curies/m3
Ba137m	2.54E-01	Curies/m3
U-dep	2.00E-04	Curies/m3
U-enr	6.43E-04	Curies/m3
U-nat	1.19E-05	Curies/m3

0600930

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

WASTE STREAM MWIR ID		**STREAM NAME**	300 Area RD TRU Waste (High U)
WIPP ID	RL-T119		
Local ID	RL-TB-119	**DESCRIPTION**	This waste stream consists of TRU waste from the Electron Accelerator.
MATRIX CODE	5400		
SITE FINAL FORM IDC			

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some boxes. Boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

931

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

RL-T119

CONTAINER:	Standard waste box	Container Matl:	steel	Liner Type:	bag
Type/Size:		Int. Vol/Ctnr:	1.9 m3	Liner Material:	plastic

Number Stored:

Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.8	0.8	m3
End of 1993:	0.8	0.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.94E-04	Curies/m3
Pu239	7.63E-03	Curies/m3
Pu240	1.71E-03	Curies/m3
Pu241	1.93E-02	Curies/m3
Pu242	9.99E-08	Curies/m3
Am241	8.70E-04	Curies/m3
U-dep	4.40E-02	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

WASTE STREAM MWIR ID	
WIPP ID	RL-T120
Local ID	*RL-TB-120*
MATRIX CODE	5400
SITE FINAL FORM IDC	
STREAM NAME	TRU Construction Debris
DESCRIPTION	*This waste stream consists of TRU waste from the construction activities.*
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000933

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

RL-T120 CONTAINER: Standard waste box
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type: bag
Liner Material: plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	50.1	50.1	m3
End of 1993:	50.1	50.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	8.75E-03	Curies/m3
Pu239	3.44E-01	Curies/m3
Pu240	7.72E-02	Curies/m3
Pu241	8.68E-01	Curies/m3
Pu242	4.50E-06	Curies/m3
Am241	3.92E-02	Curies/m3
Sr90	1.12E-02	Curies/m3
Cs137	1.19E-02	Curies/m3
Y90	1.12E-02	Curies/m3
Ba137m	1.13E-03	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T120

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type: rigid
Liner Material: HDPE
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	21.5	29.0	m3
End of 1993:	21.5	29.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	6.48E-03	Curies/m3
Pu239	2.55E-01	Curies/m3
Pu240	5.72E-02	Curies/m3
Pu241	6.43E-01	Curies/m3
Pu242	3.33E-06	Curies/m3
Am241	2.90E-02	Curies/m3
Sr90	8.28E-03	Curies/m3
Cs137	8.84E-03	Curies/m3
Y90	8.28E-03	Curies/m3
Ba137m	8.36E-03	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

00935

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING RH | GENERATOR SITE RL

WASTE STREAM

MWIR ID	
WIPP ID	RL-T121
Local ID	RL-TB-121
MATRIX CODE	5400
SITE FINAL FORM IDC	

STREAM NAME 105-KE Bldg TRU Waste

DESCRIPTION This waste stream consists of remote-handled TRU waste from the operation of the Fuel Storage Basins.

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some boxes. Boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

0000936

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING RH | GENERATOR SITE RL

RL-T121

CONTAINER:	RH Canister (for boxed waste)	Container Matl:	steel	Liner Type:	
Type/Size:		Int. Vol/Ctnr:	0.89 m3	Liner Material:	

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	435.0		
Packaging Material, Plastic	0.0		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	25.2	25.2	m3
End of 1993:	25.2	25.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	2.83E-03	Curies/m3
Pu239	1.11E-01	Curies/m3
Pu240	2.50E-02	Curies/m3
Pu241	2.81E-01	Curies/m3
Pu242	1.46E-06	Curies/m3
Am241	1.27E-02	Curies/m3
Sr90	9.47E-03	Curies/m3
Cs137	1.01E-02	Curies/m3
Y90	9.47E-03	Curies/m3
Ba137m	9.56E-03	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** RL

WASTE STREAM
MWIR ID:
WIPP ID: RL-T122
Local ID: RL-TB-122

MATRIX CODE: 5400
SITE FINAL FORM IDC:

STREAM NAME: 105-C and 105-N Bldg TRU Waste

DESCRIPTION: This waste stream consists of TRU waste from the operation of the Reactors.

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT:

TRUCON CODE:

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

00938

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T122

CONTAINER: Standard waste box
Type/Size:
Container Matl: steel
Int. Vol/Ctnr: 1.9 m3
Liner Type: bag
Liner Material: plastic
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	12.9	12.9	m3
End of 1993:	12.9	12.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.01E-02	Curies/m3
Pu239	3.95E-01	Curies/m3
Pu240	8.88E-02	Curies/m3
Pu241	9.98E-01	Curies/m3
Pu242	5.17E-06	Curies/m3
Am241	4.51E-02	Curies/m3
Sr90	7.83E-01	Curies/m3
Cs137	8.36E-01	Curies/m3
Y90	7.83E-01	Curies/m3
Ba137m	7.91E-01	Curies/m3
U-enr	1.46E-01	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

0000 30

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

RL-T122

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.3	0.4	m3
End of 1993:	0.3	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	6.22E-03	Curies/m3
Pu239	2.44E-01	Curies/m3
Pu240	5.48E-02	Curies/m3
Pu241	6.16E-01	Curies/m3
Pu242	3.20E-06	Curies/m3
Am241	2.78E-02	Curies/m3
Sr90	4.83E-01	Curies/m3
Cs137	5.16E-01	Curies/m3
Y90	4.83E-01	Curies/m3
Ba137m	4.88E-01	Curies/m3
U-enr	9.00E-02	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

000940

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE AE

WASTE STREAM MWIR ID		**STREAM NAME**	Argonne Nat Lab Type 1 TRU Waste
WIPP ID	RL-T123		
Local ID	RL-TB-123	**DESCRIPTION**	This waste stream consists of TRU waste from the Argonne National Laboratory.
MATRIX CODE	5400		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Heterogeneous		
Site Matrix Description	Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000941

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE AE

RL-T123

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.1	0.2	m3
End of 1993:	0.1	0.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.85E+00	Curies/m3
Pu239	7.27E+01	Curies/m3
Pu240	1.63E+01	Curies/m3
Pu241	1.84E+02	Curies/m3
Pu242	9.52E-04	Curies/m3
Am241	8.29E+00	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

00094?

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE AE

WASTE STREAM MWIR ID		**STREAM NAME**	*Argonne Nat Lab Type II TRU Waste*
WIPP ID	RL-T124		
Local ID	RL-TB-124	**DESCRIPTION**	This waste stream consists of TRU waste from the Argonne National Laboratory.
MATRIX CODE	5400		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Heterogeneous		
Site Matrix Description	Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

0009344

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE AE

RL-T124

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.6	m3
End of 1993:	0.4	0.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	7.09E-02	Curies/m3
Pu239	2.78E+00	Curies/m3
Pu240	6.25E-01	Curies/m3
Pu241	7.03E+00	Curies/m3
Pu242	3.64E-05	Curies/m3
Am241	3.17E-01	Curies/m3
U-enr	2.09E-02	Curies/m3
U-nat	6.04E-03	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE AE

WASTE STREAM MWIR ID	
WIPP ID	RL-T125
Local ID	RL-TB-125
MATRIX CODE	5400
SITE FINAL FORM IDC	
STREAM NAME	Argonne Nat Lab Type III TRU Waste
DESCRIPTION	This waste stream consists of TRU waste from the Argonne National Laboratory.
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000946

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **RL** WASTE TYPE TRU HANDLING CH GENERATOR SITE AE

RL-T125

CONTAINER:	Standard waste box	**Container Matl:**	steel	**Liner Type:**	bag
Type/Size:		**Int. Vol/Ctnr:**	1.9 m3	**Liner Material:**	plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	6.9	6.9	m3
End of 1993:	6.9	6.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Sr90	2.57E+02	Curies/m3
Cs137	2.80E+02	Curies/m3
Y90	2.57E+02	Curies/m3
Ba137m	2.65E+02	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.
Waste stream has been identified as TRU waste but its isotopic composition is incomplete.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE AE

RL-T125 CONTAINER: Drum | Type/Size: 55-gallon | Container Matl: steel | Int. Vol/Ctnr: 0.208 m3 | Liner Type: rigid | Liner Material: HDPE | Number Stored: | Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4.4	5.9	m3
End of 1993:	4.4	5.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Sr90	1.91E+02	Curies/m3
Cs137	2.09E+02	Curies/m3
Y90	1.91E+02	Curies/m3
Ba137m	1.98E+02	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.
Waste stream has been identified as TRU waste but its isotopic composition is incomplete.

000947

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING RH | GENERATOR SITE RL

WASTE STREAM MWIR ID		STREAM NAME	300 Area R&D High Activity TRU Waste
WIPP ID	RL-T126		
Local ID	RL-TB-126	DESCRIPTION	This waste stream consists of TRU waste from the Chemical Engineering Building Laboratory and Hot Cells.
MATRIX CODE	5400		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Heterogeneous		
Site Matrix Description	Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT:

TRUCON CODE:

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

00009948

000949

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING RH GENERATOR SITE RL

RL-T126

CONTAINER: RH Canister (for boxed waste)
Type/Size:

Container Matl: Steel
Int. Vol/Ctnr: 0.89 m3

Liner Type:
Liner Material:

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	435.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	2.5	2.5	m3
End of 1993:	2.5	2.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	5.59E-03	Curies/m3
Pu239	2.20E-01	Curies/m3
Pu240	4.94E-02	Curies/m3
Pu241	5.55E-01	Curies/m3
Pu242	2.88E-06	Curies/m3
Am241	2.51E-02	Curies/m3
Sr90	1.78E+03	Curies/m3
Cs137	1.90E+03	Curies/m3
Y90	1.78E+03	Curies/m3
Ba137m	1.80E+03	Curies/m3
U-enr	1.02E-02	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **RL** WASTE TYPE TRU HANDLING RH GENERATOR SITE RL

RL-T126

CONTAINER:	RH Canister (for drums)	Container Matl:	Steel	Liner Type:	
Type/Size:		Int. Vol/Ctnr:	0.89 m3	Liner Material:	

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	527.0		
Packaging Material, Plastic	26.0		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.8	2.4	m3
End of 1993:	1.8	2.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	4.14E-03	Curies/m3
Pu239	1.63E-01	Curies/m3
Pu240	3.66E-02	Curies/m3
Pu241	4.11E-01	Curies/m3
Pu242	2.13E-06	Curies/m3
Am241	1.86E-02	Curies/m3
Sr90	1.32E+03	Curies/m3
Cs137	1.41E+03	Curies/m3
Y90	1.32E+03	Curies/m3
Ba137m	1.33E+03	Curies/m3
U-enr	7.55E-03	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU   HANDLING CH   GENERATOR SITE BABCOCK WILCOX

WASTE STREAM MWIR ID	
WIPP ID	RL-T127
Local ID	RL-TB-127
MATRIX CODE	5400
SITE FINAL FORM IDC	
STREAM NAME	Babcock Wilcox TRU Waste
DESCRIPTION	This waste stream consists of TRU waste from the Babcock Wilcox.
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT   **TRUCON CODE**

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE BABCOCK WILCOX

RL-T127

CONTAINER:	Standard waste box	Container Matl:	steel	Liner Type:	bag
Type/Size:		Int. Vol/Ctnr:	1.9 m3	Liner Material:	plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	72.7	72.7	m3
End of 1993:	72.7	72.7	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.07E-01	Curies/m3
Pu239	4.21E+00	Curies/m3
Pu240	9.45E-01	Curies/m3
Pu241	1.06E+01	Curies/m3
Pu242	5.50E-05	Curies/m3
Am241	4.79E-01	Curies/m3
Sr90	1.68E-03	Curies/m3
Cs137	1.71E-03	Curies/m3
U-dep	7.22E-04	Curies/m3
U-enr	1.99E-06	Curies/m3
U-nat	6.71E-08	Curies/m3
Y90	1.68E-03	Curies/m3
Ba137m	1.62E-03	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE: TRU | HANDLING: CH | GENERATOR SITE: BABCOCK WILCOX

RL-T127

CONTAINER:	Drum	Container Matl:	steel	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	HDPE

Number Stored:

Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

Upper and lower weights for final waste stream are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	119.0	160.0	m3
End of 1993:	119.0	160.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	7.93E-02	Curies/m3
Pu239	3.12E+00	Curies/m3
Pu240	7.00E-01	Curies/m3
Pu241	7.87E+00	Curies/m3
Pu242	4.08E-05	Curies/m3
Am241	3.55E-01	Curies/m3
Sr90	1.25E-03	Curies/m3
Cs137	1.27E-03	Curies/m3
U-dep	5.35E-04	Curies/m3
U-enr	1.48E-06	Curies/m3
U-nat	4.97E-08	Curies/m3
Y90	1.25E-03	Curies/m3
Ba137m	1.20E-03	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE BARTLESVILLE

WASTE STREAM MWIR ID		STREAM NAME	Bartleville TRU Waste
WIPP ID	RL-T128	DESCRIPTION	This waste stream consists of TRU waste from Bartlesville.
Local ID	RL-TB-128		
MATRIX CODE	5400		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Heterogeneous		

Site Matrix Description: Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.

NO MIGRATION VARIANCE PETITION ASSIGNMENT ______ TRUCON CODE ______

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

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WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE BARTLESVILLE

RL-T128

CONTAINER:	Drum	Container Matl:	steel	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.3	0.4	m3
End of 1993:	0.3	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Sr90	1.85E-03	Curies/m3
Cs137	1.98E-03	Curies/m3
Y90	1.85E-03	Curies/m3
Ba137M	1.87E-03	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.
Waste stream has been identified as TRU waste but its isotopic composition is incomplete.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** BC

WASTE STREAM
MWIR ID
WIPP ID RL-T129
Local ID RL-TB-129

MATRIX CODE 5400

SITE FINAL FORM IDC

STREAM NAME Battelle Columbus Type I TRU Waste

DESCRIPTION This waste stream consists of TRU waste from Battelle Columbus.

Waste Matrix Code Group Heterogeneous

Site Matrix Description Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

956

000957

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE BC

RL-T129 CONTAINER: Standard waste box | Type/Size: | Container Matl: steel | Int. Vol/Ctnr: 1.9 m3 | Liner Type: bag | Liner Material: plastic | Number Stored: | Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4.8	4.8	m3
End of 1993:	4.8	4.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	3.44E-02	Curies/m3
Pu239	1.35E+00	Curies/m3
Pu240	3.03E-01	Curies/m3
Pu241	3.41E+00	Curies/m3
Pu242	1.77E-05	Curies/m3
Am241	1.54E-01	Curies/m3
Sr90	1.31E-02	Curies/m3
Cs137	1.40E-02	Curies/m3
U-enr	1.09E-03	Curies/m3
Y90	1.31E-02	Curies/m3
Ba137m	1.32E-02	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE BC

RL-T129 CONTAINER: Drum | Type/Size: 55-gallon | Container Mat'l: steel | Int. Vol/Ctnr: 0.208 m3 | Liner Type: rigid | Liner Material: HDPE | Number Stored: | Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3.9	5.3	m3
End of 1993:	3.9	5.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	2.55E-02	Curies/m3
Pu239	1.00E+00	Curies/m3
Pu240	2.25E-01	Curies/m3
Pu241	2.53E+00	Curies/m3
Pu242	1.31E-05	Curies/m3
Am241	1.14E-01	Curies/m3
Sr90	9.68E-03	Curies/m3
Cs137	1.04E-02	Curies/m3
U-enr	8.08E-04	Curies/m3
Y90	9.68E-03	Curies/m3
Ba137m	9.80E-03	Curies/m3

00958

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE BC

WASTE STREAM MWIR ID	
WIPP ID	RL-T130
Local ID	RL-TB-130
MATRIX CODE	5400
SITE FINAL FORM IDC	
STREAM NAME	Battelle Columbus Type II TRU Waste
DESCRIPTION	This waste stream consists of TRU waste from Battelle Columbus.
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000959

09600

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE BC

RL-T130

CONTAINER:	Standard waste box	Container Matl:	steel	Liner Type:	bag
Type/Size:		Int. Vol/Ctnr:	1.9 m3	Liner Material:	plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	5.6	5.6	m3
End of 1993:	5.6	5.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.46E-04	Curies/m3
Pu239	5.72E-03	Curies/m3
Pu240	1.29E-03	Curies/m3
Pu241	1.44E-02	Curies/m3
Pu242	7.49E-08	Curies/m3
Am241	6.52E-04	Curies/m3
U-enr	1.27E-05	Curies/m3

Comments

Upper and lower weights for final waste stream are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE BC

RL-T130

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type: rigid
Liner Material: HDPE
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4.6	6.2	m3
End of 1993:	4.6	6.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.08E-04	Curies/m3
Pu239	4.24E-03	Curies/m3
Pu240	9.52E-04	Curies/m3
Pu241	1.07E-02	Curies/m3
Pu242	5.55E-08	Curies/m3
Am241	4.83E-04	Curies/m3
U-enr	9.44E-06	Curies/m3

Comments

Upper and lower weights for final waste stream are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE

WASTE STREAM MWIR ID		**STREAM NAME**	Energy Systems Group TRU Waste
WIPP ID	RL-T131		
Local ID	RL-TB-131	**DESCRIPTION**	This waste stream consists of TRU waste from the Energy Systems Group
MATRIX CODE	5400		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Heterogeneous		
Site Matrix Description	Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT [ ] **TRUCON CODE** [ ]

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000963

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL WASTE TYPE TRU HANDLING CH GENERATOR SITE

RL-T131 CONTAINER: Drum Type/Size: 55-gallon

Container Matl: steel Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid Liner Material: HDPE

Number Stored: Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	26.1	35.2	m3
End of 1993:	26.1	35.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.74E-02	Curies/m3
Pu239	6.83E-01	Curies/m3
Pu240	1.53E-01	Curies/m3
Pu241	1.72E+00	Curies/m3
Pu242	8.93E-06	Curies/m3
Am241	7.78E-02	Curies/m3
Sr90	3.25E-01	Curies/m3
Cs137	3.54E-01	Curies/m3
Y90	3.25E-01	Curies/m3
Ba137m	3.35E-01	Curies/m3
U-dep	2.24E-05	Curies/m3
U-enr	3.01E-04	Curies/m3
U-nat	2.36E-07	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE EXXON

WASTE STREAM	MWIR ID	
	WIPP ID	RL-T132
	Local ID	RL-TB-132
MATRIX CODE		5400
SITE FINAL FORM IDC		

STREAM NAME *Exxon Type 1 TRU Waste*

DESCRIPTION This waste stream consists of TRU waste from Exxon.

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000964

000965

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE EXXON

RL-T132

CONTAINER:	Drum	Container Matl:	steel	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.6	0.8	m3
End of 1993:	0.6	0.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.48E-01	Curies/m3
Pu239	5.82E+00	Curies/m3
Pu240	1.31E+00	Curies/m3
Pu241	1.47E+01	Curies/m3
Pu242	7.62E-05	Curies/m3
Am241	6.64E-01	Curies/m3
Sr90	2.34E-03	Curies/m3
Cs137	2.50E-03	Curies/m3
Y90	2.34E-03	Curies/m3
Ba137m	2.36E-03	Curies/m3
U-enr	1.28E-04	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** EXXON

WASTE STREAM

MWIR ID	
WIPP ID	RL-T133
Local ID	RL-TB-133
MATRIX CODE	5400
SITE FINAL FORM IDC	

STREAM NAME Exxon Type I TRU Waste

DESCRIPTION This waste stream consists of TRU waste from Exxon.

Waste Matrix Code Group Heterogeneous

Site Matrix Description Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000967

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE EXXON

RL-T133

CONTAINER: Drum
Type/Size: 55-gallon

Container Mat'l: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	21.3	28.7	m3
End of 1993:	21.3	28.7	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.85E+00	Curies/m3
Pu239	7.26E+01	Curies/m3
Pu240	1.63E+01	Curies/m3
Pu241	1.83E+02	Curies/m3
Pu242	9.50E-04	Curies/m3
Am241	8.27E+00	Curies/m3
U-nat	2.57E-02	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | **WASTE TYPE** TRU | **HANDLING** CH | **GENERATOR SITE** LB

WASTE STREAM

MWIR ID	
WIPP ID	RL-T134
Local ID	RL-TB-134
MATRIX CODE	5400
SITE FINAL FORM IDC	

STREAM NAME Lawrence Berkeley Nat Lab TRU Waste

DESCRIPTION This waste stream consists of TRU waste from the Lawrence Berkeley National Laboratories.

Waste Matrix Code Group Heterogeneous

Site Matrix Description Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000969

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE LB

RL-T134

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type: rigid
Liner Material: HDPE
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.1	0.1	m3
End of 1993:	0.1	0.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.04E-02	Curies/m3
Pu239	4.07E-01	Curies/m3
Pu240	9.14E-02	Curies/m3
Pu241	1.03E+00	Curies/m3
Pu242	5.33E-06	Curies/m3
Am241	4.64E-02	Curies/m3
Sr90	5.56E+00	Curies/m3
Cs137	5.94E+00	Curies/m3
Y90	5.56E+00	Curies/m3
Ba137m	5.62E+00	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** LL

WASTE STREAM

MWIR ID	
WIPP ID	RL-T135
Local ID	RL-TB-135
MATRIX CODE	5400
SITE FINAL FORM IDC	

STREAM NAME Lawrence Livermore Type I TRU Waste

DESCRIPTION This waste stream consists of TRU waste from the Lawrence Livermore National Laboratories.

Waste Matrix Code Group Heterogeneous

Site Matrix Description Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000970

000971

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE LL

RL-T135

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.3	m3
End of 1993:	0.2	0.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	3.11E-02	Curies/m3
Pu239	1.22E+00	Curies/m3
Pu240	2.74E-01	Curies/m3
Pu241	3.08E+00	Curies/m3
Pu242	1.60E-05	Curies/m3
Am241	1.39E-01	Curies/m3
Sr90	1.39E-04	Curies/m3
Cs137	1.48E-04	Curies/m3
Y90	1.39E-04	Curies/m3
Ba137m	1.40E-04	Curies/m3
U-dep	2.34E-02	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE LL

WASTE STREAM MWIR ID		STREAM NAME	Lawrence Livermore Nat Lab Type II TRU Waste
WIPP ID	RL-T136		
Local ID	RL-TB-136	DESCRIPTION	This waste stream consists of TRU waste from the Lawrence Livermore National Laboratories.
MATRIX CODE	5400		
SITE FINAL FORM IDC			

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.

NO MIGRATION VARIANCE PETITION ASSIGNMENT:

TRUCON CODE:

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

00972

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL **WASTE TYPE** TRU **HANDLING** CH **GENERATOR SITE** LL

RL-T136

CONTAINER:	Drum	**Container Matl:**	steel	**Liner Type:**	rigid
Type/Size:	55-gallon	**Int. Vol/Ctnr:**	0.208 m3	**Liner Material:**	HDPE

Number Stored:

Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.1	0.1	m3
End of 1993:	0.1	0.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.05E-02	Curies/m3
Pu239	4.13E-01	Curies/m3
Pu240	9.26E-02	Curies/m3
Pu241	1.04E+00	Curies/m3
Pu242	5.40E-06	Curies/m3
Am241	4.70E-02	Curies/m3
U-dep	2.52E+01	Curies/m3
U-nat	1.62E-01	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE KERR MCGEE

WASTE STREAM MWIR ID	
WIPP ID	RL-T137
Local ID	RL-TB-137
MATRIX CODE	5400
SITE FINAL FORM IDC	

STREAM NAME: Kerr McGee TRU Waste

DESCRIPTION: This waste stream consists of TRU waste from Kerr McGee.

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000975

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL — WASTE TYPE TRU — HANDLING CH — GENERATOR SITE KERR MCGEE

RL-T137

CONTAINER: SWB
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type: bag
Liner Material: plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.0	1.0	m3
End of 1993:	1.0	1.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.16E-01	Curies/m3
Pu239	4.56E+00	Curies/m3
Pu240	1.02E+00	Curies/m3
Pu241	1.15E+01	Curies/m3
Pu242	5.96E-05	Curies/m3
Am241	5.19E-01	Curies/m3
Sr90	1.10E-01	Curies/m3
Cs137	1.21E-01	Curies/m3
Y90	1.10E-01	Curies/m3
Ba137m	1.14E-01	Curies/m3
U-dep	6.39E-04	Curies/m3
U-enr	2.29E-04	Curies/m3
U-nat	7.32E-06	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE KERR MCGEE

RL-T137

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	99.1	134.0	m3
End of 1993:	99.1	134.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	8.59E-02	Curies/m3
Pu239	3.38E+00	Curies/m3
Pu240	7.58E-01	Curies/m3
Pu241	8.52E+00	Curies/m3
Pu242	4.42E-05	Curies/m3
Am241	3.85E-01	Curies/m3
Sr90	8.18E-02	Curies/m3
Cs137	8.93E-02	Curies/m3
Y90	8.18E-02	Curies/m3
Ba137m	8.45E-02	Curies/m3
U-dep	4.74E-04	Curies/m3
U-enr	1.70E-04	Curies/m3
U-nat	5.42E-06	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

000976

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE GE

WASTE STREAM MWIR ID		**STREAM NAME**	Pleasanton Type I TRU Waste
WIPP ID	RL-T138	**DESCRIPTION**	This waste consists of TRU waste form General Electric Pleasanton.
Local ID	RL-TB-138		
MATRIX CODE	5400		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Heterogeneous		
Site Matrix Description	Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastics sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyehtylene bottles, gloves, and rubber. Absorbed combustible liquids such as oils have also been placed in some boxes. Boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000977

000978

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL — WASTE TYPE: TRU — HANDLING: CH — GENERATOR SITE: GE

RL-T138

CONTAINER:	SWB	Container Matl:	steel	Liner Type:	bag
Type/Size:		Int. Vol/Ctnr:	1.9 m3	Liner Material:	plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	40.9	40.9	m3
End of 1993:	40.9	40.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.36E-05	Curies/m3
Pu239	5.35E-04	Curies/m3
Pu240	1.20E-04	Curies/m3
Pu241	1.35E-03	Curies/m3
Pu242	7.00E-09	Curies/m3
Am241	6.09E-05	Curies/m3
Sr90	2.76E-04	Curies/m3
Cs137	2.93E-04	Curies/m3
Y90	2.76E-04	Curies/m3
Ba137m	2.77E-04	Curies/m3
U-nat	2.05E-08	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL   WASTE TYPE TRU   HANDLING CH   GENERATOR SITE GE

WASTE STREAM MWIR ID		**STREAM NAME**	Pleasanton Type II TRU Waste
WIPP ID	RL-T139		
Local ID	RL-TB-139	**DESCRIPTION**	This waste stream consists of TRU waste from General Electric Pleasanton.
MATRIX CODE	5400		
SITE FINAL FORM IDC			

Waste Matrix Code Group *Heterogeneous*

Site Matrix Description Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some boxes. Boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT   **TRUCON CODE**

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

00980

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE GE

RL-T139

CONTAINER:	SWB	Container Matl:	steel	Liner Type:	bag
Type/Size:		Int. Vol/Ctnr:	1.9 m3	Liner Material:	plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	146.0	146.0	m3
End of 1993:	146.0	146.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	3.30E-03	Curies/m3
Pu239	1.30E-01	Curies/m3
Pu240	2.91E-02	Curies/m3
Pu241	3.27E-01	Curies/m3
Pu242	1.70E-06	Curies/m3
Am241	1.48E-02	Curies/m3
Sr90	1.31E-02	Curies/m3
Cs137	1.40E-02	Curies/m3
Y90	1.31E-02	Curies/m3
Ba137m	1.32E-02	Curies/m3
U-nat	7.08E-04	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU   HANDLING CH   GENERATOR SITE RF

WASTE STREAM MWIR ID	
WIPP ID	RL-T140
Local ID	RL-TB-140
MATRIX CODE	5400
SITE FINAL FORM IDC	
STREAM NAME	Rocky Flats Type I TRU Waste
DESCRIPTION	This waste stream consists of TRU waste from Rocky Flats.
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

1880000

00983

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

RL-T140

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	6.9	9.3	m3
End of 1993:	6.9	9.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.26E-02	Curies/m3
Pu239	4.94E-01	Curies/m3
Pu240	1.11E-01	Curies/m3
Pu241	1.25E+00	Curies/m3
Pu242	6.47E-06	Curies/m3
Am241	5.63E-02	Curies/m3
Sr90	9.16E-03	Curies/m3
Cs137	9.78E-03	Curies/m3
Y90	9.16E-03	Curies/m3
Ba137m	9.25E-03	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RF

WASTE STREAM MWIR ID		**STREAM NAME**	Rocky Flats Type II TRU Waste
WIPP ID	RL-T141		
Local ID	RL-TB-141	**DESCRIPTION**	This waste stream consists of TRU waste from Rocky Flats.
MATRIX CODE	5400		
SITE FINAL FORM IDC			

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Absorbed combustible liquids such as oils have also been placed in some drums. Drums are also used for disposal of high-efficiency particulate air filters.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000983

00984

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RF

RL-T141

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	74.1	100.0	m3
End of 1993:	74.1	100.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	2.59E-02	Curies/m3
Pu239	1.02E+00	Curies/m3
Pu240	2.28E-01	Curies/m3
Pu241	2.57E+00	Curies/m3
Pu242	1.33E-05	Curies/m3
Am241	1.16E-01	Curies/m3
Sr90	5.82E-03	Curies/m3
Cs137	6.27E-03	Curies/m3
Y90	5.82E-03	Curies/m3
Ba137m	5.94E-03	Curies/m3
U-dep	3.03E-01	Curies/m3
U-enr	1.25E-02	Curies/m3
U-nat	7.65E-04	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE SALT LAKE CITY

WASTE STREAM MWIR ID	
WIPP ID	RL-T142
Local ID	RL-T8-142
MATRIX CODE	5400
SITE FINAL FORM IDC	
STREAM NAME	Salt Lake City TRU Waste
DESCRIPTION	This waste stream consists of TRU waste from Salt Lake City.
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, Instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some boxes. Boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000986

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE SALT LAKE CITY

RL-T142

CONTAINER: SWB
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type: bag
Liner Material: plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.9	0.9	m3
End of 1993:	0.9	0.9	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Sr90	9.37E-05	Curies/m3
Cs137	1.00E-04	Curies/m3
Y90	9.37E-05	Curies/m3
Ba137m	9.46E-07	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.
Waste stream has been identified a TRU waste but its isotopic composition is incomplete.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **RL** | WASTE TYPE: TRU | HANDLING: CH | GENERATOR SITE: GE

WASTE STREAM MWIR ID	
WIPP ID	RL-T143
Local ID	RL-TB-143
MATRIX CODE	5400
SITE FINAL FORM IDC	
STREAM NAME	GE San Jose and Vallecitos TRU Waste
DESCRIPTION	This waste consists of typically contact-handled TRU waste from the General Electric Plants at San Jose and Vallecitos. A volume of 1.10E+2 m3 is radioactive sources from General Electric Vallecitos Plant, generated in 1974.
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms. The waste consists of irradiated fuel from R&D activitiers, both in complete assemblies or pins of irradiated fuel; and irradiated fuel fragments and resultant waste generated from irradiated fuel experiments and/or examinations, such as polishing residue, cutting fluids, absorbents, and metal fines.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000987

988

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE GE

RL-T143

CONTAINER: SWB
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type: bag
Liner Material: plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	49.1	49.1	m3
End of 1993:	49.1	49.1	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	2.34E-02	Curies/m3
Pu239	9.18E-01	Curies/m3
Pu240	2.06E-01	Curies/m3
Pu241	2.32E+00	Curies/m3
Pu242	1.20E-05	Curies/m3
Am241	1.05E-01	Curies/m3
Sr90	6.19E-04	Curies/m3
Cs137	6.59E-04	Curies/m3
Y90	6.19E-04	Curies/m3
Ba137m	6.24E-04	Curies/m3
U-enr	4.46E-04	Curies/m3
U-nat	2.53E-04	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE GE

RL-T143

CONTAINER:	Drum	Container Matl:	steel	Liner Type:	rigid
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4.2	5.7	m3
End of 1993:	4.2	5.7	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.74E-02	Curies/m3
Pu239	6.85E-01	Curies/m3
Pu240	1.54E-01	Curies/m3
Pu241	1.73E+00	Curies/m3
Pu242	8.97E-06	Curies/m3
Am241	7.81E-02	Curies/m3
Sr90	4.62E-04	Curies/m3
Cs137	4.92E-04	Curies/m3
Y90	4.62E-04	Curies/m3
Ba137m	4.66E-04	Curies/m3
U-enr	3.33E-04	Curies/m3
U-nat	1.89E-04	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE GE, WARD

WASTE STREAM MWIR ID		**STREAM NAME**	GE Vallecitos and Ward TRU Waste
WIPP ID	RL-T144		
Local ID	RL-TB-144	**DESCRIPTION**	This waste stream consists of TRU waste from the General Electric Plant at Vallecitos and waste from Ward.
MATRIX CODE	5400		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Heterogeneous		

Site Matrix Description: Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

00991

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE GE, WARD

RL-T144 CONTAINER: SWB
Type/Size:

Container Mat'l: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type: bag
Liner Material: plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	313.0	313.0	m3
End of 1993:	313.0	313.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	3.00E-02	Curies/m3
Pu239	1.18E+00	Curies/m3
Pu240	2.65E-01	Curies/m3
Pu241	2.98E+00	Curies/m3
Pu242	1.54E-05	Curies/m3
Am241	1.34E-01	Curies/m3
Sr90	4.30E+01	Curies/m3
Cs137	4.37E+01	Curies/m3
Y90	4.30E+01	Curies/m3
Ba137m	4.14E+01	Curies/m3
U-dep	2.36E-04	Curies/m3
U-enr	1.32E-03	Curies/m3
U-nat	1.13E-04	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE GE, WARD

RL-T144

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type: rigid
Liner Material: HDPE
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	76.3	103.0	m3
End of 1993:	76.3	103.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	2.28E-02	Curies/m3
Pu239	8.96E-01	Curies/m3
Pu240	2.01E-01	Curies/m3
Pu241	2.26E+00	Curies/m3
Pu242	1.17E-05	Curies/m3
Am241	1.02E-01	Curies/m3
Sr90	3.26E+01	Curies/m3
Cs137	3.32E+01	Curies/m3
Y90	3.26E+01	Curies/m3
Ba137m	3.14E+01	Curies/m3
U-dep	1.79E-04	Curies/m3
U-enr	1.01E-03	Curies/m3
U-nat	8.55E-05	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE WARD

WASTE STREAM MWIR ID		**STREAM NAME**	Ward TRU Waste
WIPP ID	RL-T145		
Local ID	RL-TB-145	**DESCRIPTION**	This waste stream consists of TRU waste from Ward.
MATRIX CODE	5400		
SITE FINAL FORM IDC			

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

000994

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE WARD

RL-T145

CONTAINER: SWB
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type: bag
Liner Material: plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	78.0	78.0	m3
End of 1993:	78.0	78.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	9.63E-04	Curies/m3
Pu239	3.78E-02	Curies/m3
Pu240	8.49E-03	Curies/m3
Pu241	9.55E-02	Curies/m3
Pu242	4.95E-07	Curies/m3
Am241	4.31E-03	Curies/m3
Sr90	1.28E-02	Curies/m3
Cs137	1.37E-02	Curies/m3
Y90	1.28E-02	Curies/m3
Ba137m	1.30E-02	Curies/m3
U-dep	2.35E-04	Curies/m3
U-enr	4.66E-05	Curies/m3
U-nat	6.93E-06	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE WARD

RL-T145

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	22.0	29.7	m3
End of 1993:	22.0	29.7	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	7.13E-04	Curies/m3
Pu239	2.80E-02	Curies/m3
Pu240	6.29E-03	Curies/m3
Pu241	7.07E-02	Curies/m3
Pu242	3.67E-07	Curies/m3
Am241	3.19E-03	Curies/m3
Sr90	9.48E-03	Curies/m3
Cs137	1.02E-02	Curies/m3
Y90	9.48E-03	Curies/m3
Ba137m	9.60E-03	Curies/m3
U-dep	1.74E-04	Curies/m3
U-enr	3.45E-05	Curies/m3
U-nat	5.13E-06	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

WASTE STREAM MWIR ID	
WIPP ID	RL-T146
Local ID	RL-TB-146
MATRIX CODE	5400
SITE FINAL FORM IDC	
STREAM NAME	234 5Z High Pu238 TRU Waste
DESCRIPTION	This waste stream consists of TRU waste from the High Pu238 routed through the Plutonium Finishing Plant. Waste originated from an off-site R&D activity.
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

000997

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

RL-T146 CONTAINER: Type/Size: SWB

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type: bag
Liner Material: plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	83.0	83.0	m3
End of 1993:	83.0	83.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	5.50E+02	Curies/m3
Pu239	2.08E+01	Curies/m3
Pu240	4.68E+00	Curies/m3
Pu241	5.26E+01	Curies/m3
Pu242	2.72E-04	Curies/m3
Am241	2.37E+00	Curies/m3
U-dep	1.80E-06	Curies/m3
U-enr	3.42E-05	Curies/m3
U-nat	3.47E-06	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE RL

RL-T146

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type: rigid
Liner Material: HDPE
Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	79.8	108.0	m3
End of 1993:	79.8	108.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	4.08E+02	Curies/m3
Pu239	1.54E+01	Curies/m3
Pu240	3.46E+00	Curies/m3
Pu241	3.89E+01	Curies/m3
Pu242	2.02E-04	Curies/m3
Am241	1.76E+00	Curies/m3
U-dep	1.33E-06	Curies/m3
U-enr	2.53E-05	Curies/m3
U-nat	2.57E-06	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING RH GENERATOR SITE RL

WASTE STREAM	MWIR ID		
	WIPP ID	RL-T147	
	Local ID	RL-TB-147	
MATRIX CODE		5400	
SITE FINAL FORM IDC			

STREAM NAME: 324 and 325 B Bldg Op TRU Caisson Waste

DESCRIPTION: This waste stream consists of TRU waste from the Chemical Engineering Building Laboratory and Hot Cells, and the Radiochemistry Building Shielded Area.

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

00993

0001000

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING RH GENERATOR SITE RL

RL-T147

CONTAINER: RH Canister (for boxed waste)
Type/Size:

Container Matl: Steel
Int. Vol/Ctnr: 0.89 m3

Liner Type:
Liner Material:

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	435.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.5	0.5	m3
End of 1993:	0.5	0.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	2.30E+00	Curies/m3
Pu239	1.44E+01	Curies/m3
Pu240	7.19E+00	Curies/m3
Pu241	4.51E+02	Curies/m3
Pu242	2.05E-04	Curies/m3
Sr90	6.46E+00	Curies/m3
Cs137	6.89E+00	Curies/m3
Y90	6.46E+00	Curies/m3
Ba137m	6.52E+00	Curies/m3
U-dep	2.37E-03	Curies/m3
U-enr	4.10E-02	Curies/m3
U-nat	9.61E-05	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING RH GENERATOR SITE RL

RL-T147

CONTAINER:	RH Canister (for drum waste)	Container Matl:	Steel	Liner Type:	
Type/Size:		Int. Vol/Ctnr:	0.89 m3	Liner Material:	

Number Stored:

Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	527.0		
Packaging Material, Plastic	26.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.2	1.6	m3
End of 1993:	1.2	1.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.66E+00	Curies/m3
Pu239	1.04E+01	Curies/m3
Pu240	5.20E+00	Curies/m3
Pu241	3.26E+02	Curies/m3
Pu242	1.48E-04	Curies/m3
Sr90	4.67E+00	Curies/m3
Cs137	4.99E+00	Curies/m3
Y90	4.67E+00	Curies/m3
Ba137m	4.72E+00	Curies/m3
U-dep	1.71E-03	Curies/m3
U-enr	2.96E-02	Curies/m3
U-nat	6.95E-05	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

WASTE STREAM

MWIR ID	
WIPP ID	RL-T148
Local ID	RL-TB-148
MATRIX CODE	5400
SITE FINAL FORM IDC	

STREAM NAME 327 C, L Oper High Activity TRU Waste

DESCRIPTION This waste stream consists of typically contact-handled TRU waste from the Post Irradiation Test Laboratory.

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some boxes. Boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

001002

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

003 1003

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

RL-T148

CONTAINER: SWB
Type/Size:

Container Matl: steel
Int. Vol/Ctnr: 1.9 m3

Liner Type: bag
Liner Material: plastic

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.8	0.8	m3
End of 1993:	0.8	0.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	8.29E-01	Curies/m3
Pu239	3.26E+01	Curies/m3
Pu240	7.31E+00	Curies/m3
Pu241	8.22E+01	Curies/m3
Pu242	4.26E-04	Curies/m3
Am241	3.71E+00	Curies/m3
Sr90	4.59E+01	Curies/m3
Cs137	5.00E+01	Curies/m3
Y90	4.59E+01	Curies/m3
Ba137m	4.73E+01	Curies/m3
U-dep	2.10E-02	Curies/m3
U-enr	1.43E-01	Curies/m3
U-nat	2.41E-04	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING RH GENERATOR SITE RL

WASTE STREAM MWIR ID	
WIPP ID	RL-T149
Local ID	RL-TB-149
MATRIX CODE	S400
SITE FINAL FORM IDC	
STREAM NAME	325 A R&D TRU Caisson Waste
DESCRIPTION	This waste stream consists of TRU waste from the Cesium Recovery Facility of the Radiochemistry Building.
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

001004

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING RH GENERATOR SITE RL

RL-T149

CONTAINER: RH Canister (for box waste)
Type/Size:

Container Matl: Steel
Int. Vol/Ctnr: 0.89 m3

Liner Type:
Liner Material:

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	435.0		
Packaging Material, Plastic	0.0		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.4	m3
End of 1993:	0.4	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	2.87E-03	Curies/m3
Pu239	1.80E-02	Curies/m3
Pu240	8.99E-03	Curies/m3
Pu241	5.64E-01	Curies/m3
Pu242	2.56E-07	Curies/m3
Sr90	8.18E-03	Curies/m3
Cs137	8.74E-03	Curies/m3
Y90	8.18E-03	Curies/m3
Ba137m	8.27E-03	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | WASTE TYPE TRU | HANDLING RH | GENERATOR SITE RL

RL-T149 CONTAINER: RH Canister (for drum waste) Type/Size:

Container Matl: Steel | Int. Vol/Ctnr: 0.89 m3

Liner Type: | Liner Material:

Number Stored: | Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	527.0		
Packaging Material, Plastic	26.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.3	0.4	m3
End of 1993:	0.3	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	2.13E-03	Curies/m3
Pu239	1.34E-02	Curies/m3
Pu240	6.66E-03	Curies/m3
Pu241	4.18E-01	Curies/m3
Pu242	1.90E-07	Curies/m3
Sr90	6.06E-03	Curies/m3
Cs137	6.47E-03	Curies/m3
Y90	6.06E-03	Curies/m3
Ba137m	6.12E-03	Curies/m3

Comments

Upper and lower weights for final waste form are unknown.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU   HANDLING CH   GENERATOR SITE RL

WASTE STREAM MWIR ID		STREAM NAME	234 5Z High Activity TRU CH Waste
WIPP ID	RL-T150		
Local ID	RL-TB-150	DESCRIPTION	This waste stream consists of TRU waste from the Plutonium Finishing Plant that is relatively high in fission product activity.
MATRIX CODE	5400		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Heterogeneous		
Site Matrix Description	Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing and fixture and soil. Boxes typically contain whole and sectioned glove boxes, hoods, ducting, conduit, lathes, pumps, piping, fans, light fixture, instrumentation, tools, conveyor sections, wire, etc. The combustible materials in boxes may include cotton rags and clothing, plastic sheeting, plastic pipe, tape, ladders, plexiglass, step benches, polyethylene bottles, gloves and rubber. Absorbed combustible liquids such as oils have also been placed in some drums and boxes. Drums and boxes are also used for disposal of high-efficiency particulate air filters. Several boxes contain only high-efficiency particulate air filters, while others contain these filters and other waste forms.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT   TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

0010007

0010003

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU   HANDLING CH   GENERATOR SITE RL

RL-T150   CONTAINER: SWB   Type/Size:

Container Mat'l: steel   Int. Vol/Ctnr: 1.9 m3

Liner Type: bag   Liner Material: plastic

Number Stored: Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	706.7	0.0	0.0
Aluminum-Based Metals/Alloys	168.9	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	39.4	0.0	0.0
Cellulosics	11.4	0.0	0.0
Rubber	0.3	0.0	0.0
Plastics	24.2	0.0	0.0
Solidified, Inorganic matrix	4.4	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	154.0		
Packaging Material, Plastic	1.2		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	127.0	127.0	m3
End of 1993:	127.0	127.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	2.43E-01	Curies/m3
Pu239	9.55E+00	Curies/m3
Pu240	2.14E+00	Curies/m3
Pu241	2.41E+01	Curies/m3
Pu242	1.25E-04	Curies/m3
Am241	1.09E+00	Curies/m3
Sr90	3.53E-02	Curies/m3
Cs137	3.77E-02	Curies/m3
Y90	3.53E-02	Curies/m3
Ba137m	3.57E-02	Curies/m3
U-dep	8.79E-07	Curies/m3
U-enr	8.29E-05	Curies/m3
U-nat	6.50E-07	Curies/m3

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL

WASTE TYPE TRU HANDLING CH GENERATOR SITE RL

RL-T150

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: rigid
Liner Material: HDPE

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	552.0	0.0	0.0
Aluminum-Based Metals/Alloys	87.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	43.0	0.0	0.0
Cellulosics	105.0	0.0	0.0
Rubber	45.0	0.0	0.0
Plastics	107.0	0.0	0.0
Solidified, Inorganic matrix	15.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	18.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	37.0		

Comments

Upper and lower weights for final waste form are unknown.

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	122.0	164.0	m3
End of 1993:	122.0	164.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	1.80E-01	Curies/m3
Pu239	7.07E+00	Curies/m3
Pu240	1.59E+00	Curies/m3
Pu241	1.79E+01	Curies/m3
Pu242	9.25E-05	Curies/m3
Am241	8.06E-01	Curies/m3
Sr90	2.62E-02	Curies/m3
Cs137	2.79E-02	Curies/m3
Y90	2.62E-02	Curies/m3
Ba137m	2.64E-02	Curies/m3
U-dep	6.51E-07	Curies/m3
U-enr	6.14E-05	Curies/m3
U-nat	4.81E-07	Curies/m3

600100

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME RL | **WASTE TYPE** TRU | **HANDLING** RH | **GENERATOR SITE** RL

WASTE STREAM MWIR ID		**STREAM NAME**	Projected RH-TRU Waste
WIPP ID	RL-T202		
Local ID	RL-TB-202	**DESCRIPTION**	The waste stream consists of projected TRU waste from 1994 to 2022. A major portion of the projected waste is from facility transition activities at former fuel reprocessing facilities at the Hanford Site.
MATRIX CODE	5400		
SITE FINAL FORM IDC	001		

Waste Matrix Code Group Heterogeneous

Site Matrix Description The waste includes wood, plastics, paper, absorbents, failed machinery, tools, glass, concrete, plumbing, fixtures, and soils. The composition will vary from each container.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

RL-T202

CONTAINER:	RH Canister	**Container Matl:**	Steel	**Liner Type:**	
Type/Size:	RH Canister	**Int. Vol/Ctnr:**	0.89 m3	**Liner Material:**	

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	17.0	0.7	410.0
Aluminum-Based Metals/Alloys	4.0	0.2	110.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	27.0	0.0	481.0
Rubber	11.0	0.0	139.0
Plastics	28.0	1.8	456.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	7.0	0.4	193.0
Packaging Materials, Steel	435.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	2.0	2.0	m3/yr
1995:	103.0	103.0	m3/yr
1996:	39.0	39.0	m3/yr
1997:	2.0	2.0	m3/ry
1998-2002:	16.0	16.0	m3/yr
2003-2022:	51.0	51.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239		Curies/m3
Pu240		Curies/m3
Sr90		Curies/m3
Y90		Curies/m3
Cs137		Curies/m3
Ba137m		Curies/m3

Comments

Activity for these radionuclides is unknown.

Footnotes

An additional 11, 861 m3 of "suspect" nonmixed RH-TRU waste has been reported by Hanford in the data submittals. Sufficient information is currently unavailable on the processes that are anticipated to generate this waste, to ascertain if this waste would be eligible for disposal in WIPP as RH-TRU. Additional information has been requested from Hanford to resolve this issue in Revision 2 of the WTWBIR.

Sandia National Laboratory – New Mexico

SANDIA NATIONAL LABORATORIES/NEW MEXICO (SA)
WASTE STREAM PROFILES

The following modifications were made by the WTWBIR team in developing the SA waste stream profiles:

- Final Waste Form Groups were not provided by SA. In order to permit roll-ups of the data, the WTWBIR team assigned Final Waste Form Groups based on the descriptions and parameters provided by SA.
- ITRI waste stream(s) are included in the SA submittal.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME SA

WASTE TYPE TRU **HANDLING** CH **GENERATOR SITE** IT

WASTE STREAM MWIR ID		**STREAM NAME**	Lovelace ITRI Waste Stream
WIPP ID	SA-T001	**DESCRIPTION**	Heterogeneous mixture of metals and combusitble lab trash including stainless steel foil, brass and aluminum parts, paper, plastics, rubber gloves and glass. There are no liquids.
Local ID	None		
MATRIX CODE	8900		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Heterogeneous		
Site Matrix Description	Waste is in final form.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT **TRUCON CODE**

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

001015

SITE NAME SA

WASTE TYPE TRU HANDLING CH GENERATOR SITE IT

SA-T001 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material: PVC

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	20.0	10.0	30.0
Aluminum-Based Metals/Alloys	3.0	1.0	5.0
Other Metals	6.0	2.0	10.0
Other Inorganic Materials	15.0	10.0	20.0
Cellulosics	3.0	1.0	5.0
Rubber	3.0	1.0	5.0
Plastics	4.0	2.0	6.0
Solidified, Inorganic matrix	40.0	20.0	60.0
Solidified, Organic matrix	3.0	1.0	5.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	80.0		
Packaging Material, Plastic	10.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	7.0	7.0	m3
End of 1993:	7.0	7.0	m3
1994:	0.0	0.0	m3/yr
1995:	5.0	5.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.2	0.2	m3/yr
2003-2022:	0.1	0.1	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	2.50E-01	Curies/m3
Cm244	8.00E-01	Curies/m3
Pu239	5.00E-01	Curies/m3
Np237	1.20E-02	Curies/m3

Comments

Weights and volumes of individual lab trash items are estimated based on information available.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME SA **WASTE TYPE** MTRU **HANDLING** CH **GENERATOR SITE** SA

WASTE STREAM	MWIR ID	SA-W134
	WIPP ID	SA-W134
	Local ID	none
MATRIX CODE		8900
SITE FINAL FORM IDC		
Waste Matrix Code Group		Heterogeneous
Site Matrix Description		Waste is in final form.

STREAM NAME Transuranic Waste at Hot Cell Facility

DESCRIPTION Predominately metal lab trash including saw blades, copper & brass fittings. Balance of waste is combustible lab trash including rubber gloves and Tygon tubing. There are no liquids.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

9101002

0101017

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME SA

WASTE TYPE MTRU HANDLING CH GENERATOR SITE SA

SA-W134

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material: PVC

Number Stored:
Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	2.0	1.0	3.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	2.0	1.0	3.0
Other Inorganic Materials	1.0	1.0	1.0
Cellulosics	2.0	1.0	3.0
Rubber	2.0	1.0	3.0
Plastics	2.0	1.0	3.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	80.0		
Packaging Material, Plastic	10.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.0	1.0	m3
End of 1993:	1.0	1.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

UNK

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Am241	1.00E-02	Curies/m3
Pu239	5.00E-06	Curies/m3

Comments

Weights and volumes of invididual lab trash items are based on current information available.

Savannah River Site

001018

SAVANNAH RIVER SITE (SR) WASTE STREAM PROFILES

The following modifications were made by the WTWBIR team in developing the SR waste stream profiles:

- SR Final Waste Form Groups were modified to be consistent with the nomenclature used in the WTWBID. These changes included word and spelling changes. The assigned Final Waste Form Groups are consistent with the information provided by SR.
- SR provided total projections for the years 1993 to 2022 instead of annual waste generation rates. The WTWBIR team modified the site data by dividing the SR total projections equally across the years 1993 to 2022. This was necessary to maintain consistency with the other sites and to roll-up the volumes correctly. The years to which the volumes are assigned may not be meaningful.
- An RH-TRU waste stream has been compiled from IDB volumes and information from SR to make the RH-TRU in the WTWBIR consistent with that in the IDB.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME SR

WASTE TYPE TRU HANDLING CH GENERATOR SITE SR

WASTE STREAM MWIR ID		**STREAM NAME**	
WIPP ID	SR-T001	**DESCRIPTION**	Non-mixed TRU derived from IDB.
Local ID			
MATRIX CODE			
SITE FINAL FORM IDC			
Waste Matrix Code Group	*Solidified Organics*		
Site Matrix Description			

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

020100

1021

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME SR

WASTE TYPE TRU HANDLING CH GENERATOR SITE SR

SR-T001 CONTAINER: Drum Type/Size: 55-gallon

Container Matl: steel Int. Vol/Ctnr: 0.208 m3

Liner Type: Liner Material:

Number Stored: 973 Number Projected: 2130

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	548.1	206.7	673.1
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	394.2	149.0	485.6
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	198.2	396.4	m3
End of 1993:	202.4	404.8	m3
1994:	4.2	8.3	m3/yr
1995:	4.2	8.3	m3/yr
1996:	4.2	8.3	m3/yr
1997:	4.2	8.3	m3/ry
1998-2002:	4.2	8.3	m3/yr
2003-2022:	4.2	8.3	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	5.98E+01	Curies/m3
Pu239	1.05E+00	Curies/m3
Pu240	2.60E-01	Curies/m3
Pu241	1.25E+01	Curies/m3
Am241	1.70E+00	Curies/m3
Others	1.00E-02	Curies/m3

Comments

Other radionuclides present - activity is reported as less than 0.01 curies/m3

Footnotes

Numbers of containers in storage is from "End of 1993 Projected" numbers (202.35 m3 = 973 drums). Number of projected containers equals 973 drums from repackaging of stored waste to final form plus the number of containers from final form of newly generated waste (1157 drums).

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME SR | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE SR

WASTE STREAM MWIR ID	
WIPP ID	SR-T002
Local ID	
MATRIX CODE	
SITE FINAL FORM IDC	
STREAM NAME	
DESCRIPTION	Non-mixed TRU deried from IDB.
Waste Matrix Code Group	Combustible
Site Matrix Description	

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

001022

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **SR** | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE SR

SR-T002

CONTAINER:	Drum	Container Matl:	steel	Liner Type:		Number Stored:	19552
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:		Number Projected:	57512

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	2.9	0.0	7.2
Cellulosics	575.6	105.8	961.5
Rubber	55.2	55.2	163.5
Plastics	165.6	105.8	288.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3654.3	3654.3	m3
End of 1993:	4066.8	4066.8	m3
1994:	412.5	412.5	m3/yr
1995:	412.5	412.5	m3/yr
1996:	412.5	412.5	m3/yr
1997:	412.5	412.5	m3/ry
1998-2002:	412.5	412.5	m3/yr
2003-2022:	412.5	412.5	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	5.98E+01	Curies/m3
Pu239	1.05E+00	Curies/m3
Pu240	2.60E-01	Curies/m3
Pu241	1.25E+01	Curies/m3
Am241	1.70E+00	Curies/m3
Others	1.00E-02	Curies/m3

Comments

Other radionuclides present - activity is reported as less than 0.01 curies/m3.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME SR

WASTE TYPE TRU **HANDLING** RH **GENERATOR SITE** SR

WASTE STREAM

MWIR ID TS-01

WIPP ID SR-T003

Local ID 049/050

MATRIX CODE 5400

SITE FINAL FORM IDC

STREAM NAME RH TRU Waste

DESCRIPTION Heterogeneous Debris generated from the SRTC High Level Caves.

Waste Matrix Code Group Heterogeneous

Site Matrix Description This waste is generated primarily through research activities from on-site laboratories. This waste stream is primarily solids consisting of labware, rags, and other job controlled waste.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU		Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

Footnotes

This waste stream has been created for the WTWBIR by the WTWBIR to be consistent with Draft Rev. 10 of the IDB.

1001024

0001025

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **SR** WASTE TYPE TRU HANDLING RH GENERATOR SITE SR

SR-T003 CONTAINER: Drum
Type/Size:

Container Matl: Steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 0
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	2.9	0.0	7.2
Cellulosics	575.6	105.8	961.5
Rubber	55.2	55.2	163.5
Plastics	165.6	105.8	288.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.0	0.0	m3
End of 1993:	0.0	0.0	m3
1994:	2.0	4.0	m3/yr
1995:	1.1	2.1	m3/yr
1996:	1.1	2.1	m3/yr
1997:	1.1	2.1	m3/ry
1998-2002:	1.1	2.1	m3/yr
2003-2022:	1.1	2.2	m3/yr

TYPICAL EPA CODES APPLICABLE

-

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
SR90	3.28E+00	Curies/m3
Y90	3.28E+00	Curies/m3
Cs137	3.28E+00	Curies/m3
Ba137m	3.10E+00	Curies/m3
Pm147	8.13E-01	Curies/m3
Pu238	1.69E-01	Curies/m3
Cm244	2.43E+00	Curies/m3

Footnotes

For this waste stream profile the generation of this waste stream has been projected to 2022, two mroe years than in the Draft IDB, Rev. 10.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME SR

WASTE TYPE MTRU HANDLING CH GENERATOR SITE SR

WASTE STREAM MWIR ID	SR-W006	**STREAM NAME**	Organic liquids
WIPP ID	SR-W006		
Local ID		**DESCRIPTION**	Mixed TTA/Xylene
MATRIX CODE	2000		
SITE FINAL FORM IDC			
Waste Matrix Code Group	Solidified Organics		
Site Matrix Description	Laboratory waste from plutonium extractions generated in the Savannah River Technology Center (SRTC) 773-A Facility. Homogeneous, liquid, flammable, xylene-based chelating agent. TTA - Thenoyl trifluoroacetone.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME SR

WASTE TYPE MTRU HANDLING CH GENERATOR SITE SR

SR-W006

CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: steel
Int. Vol/Ctnr: 0.208 m3

Liner Type:
Liner Material:

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	548.1	206.7	673.1
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	394.2	149.0	485.6
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.03	0.05	m3
End of 1993:	0.03	0.05	m3
1994:	0.00	0.00	m3/yr
1995:	0.00	0.00	m3/yr
1996:	0.00	0.00	m3/yr
1997:	0.00	0.00	m3/ry
1998-2002:	0.00	0.00	m3/yr
2003-2022:	0.00	0.00	m3/yr

TYPICAL EPA CODES APPLICABLE

D001A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239		Curies/m3
Am241		Curies/m3

Footnotes

SRS reported the following activities: Pu239 10E+05 microcuries/gram; Am241 10E+03 dpm/m

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME SR

WASTE TYPE MTRU HANDLING CH GENERATOR SITE SR

WASTE STREAM MWIR ID	SR-W026	**STREAM NAME**	Heterogeneous Debris
WIPP ID	SR-W026	**DESCRIPTION**	Thirds TRU Waste
Local ID	049/050		
MATRIX CODE	5400		
SITE FINAL FORM IDC			

Waste Matrix Code Group Heterogeneous

Site Matrix 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. This waste is generated primarily through separation activities in the course of plutonium prodution, includes small amounts of TRU waste from on site laboratories.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

00108228

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **SR** WASTE TYPE MTRU HANDLING CH GENERATOR SITE SR

SR-W026

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: steel
Int. Vol/Ctnr: 0.208 m3
Liner Type:
Liner Material:
Number Stored: 534
Number Projected: 12859

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	2.9	0.0	7.2
Cellulosics	575.6	105.8	961.5
Rubber	55.2	55.2	163.5
Plastics	165.6	105.8	288.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	66.9	133.8	m3
End of 1993:	111.1	222.2	m3
1994:	44.2	88.4	m3/yr
1995:	44.2	88.4	m3/yr
1996:	44.2	88.4	m3/yr
1997:	44.2	88.4	m3/ry
1998-2002:	44.2	88.4	m3/yr
2003-2022:	44.2	88.4	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	5.98E+01	Curies/m3
Pu239	1.05E+00	Curies/m3
Pu240	2.60E-01	Curies/m3
Pu241	1.25E+01	Curies/m3
Am241	1.70E+00	Curies/m3
Others	1.00E-02	Curies/m3

TYPICAL EPA CODES APPLICABLE

D001C
D003D
D004A
D006A
D007A
D008A
D009A
D011A
D018
D019
D022
D023
D024
D025
D026
P012

Comments

Other radiouclides present - activity is reported as less than 0.01 curies/m3.

Footnotes

Number of containers in storage is from "End of 1993 Projected" numbers (111.1 m3 = 534 drums). Number of projected containers equals 534 drums from repackaging of stored waste to final form plus the number of containers from final form of newly generated waste (12325 drums).

SITE NAME SR   WASTE TYPE MTRU   HANDLING CH   GENERATOR SITE SR

P015
P048
P113
P120
U002
U032
U052
U080
U133
U134
U144
U151c
U154
U161
U209
U211
U220
U226
U239

001030

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME SR

WASTE TYPE MTRU HANDLING CH GENERATOR SITE SR

WASTE STREAM

MWIR ID SR-W027

WIPP ID SR-W027

Local ID 049/050

MATRIX CODE 5400

SITE FINAL FORM IDC

STREAM NAME Heterogeneous Debris

DESCRIPTION Solvent TRU Waste

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: 200 Areas (F and H Separations Facilities). This waste is generated primarily through separation activities in the course of plutonium production and includes small amounts of TRU waste from on site laboratories. This waste stream is primarily solids consisting of booties, lab coats, floor sweepings, labware, rags, and other job control waste.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X	PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

0001032

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME SR   WASTE TYPE MTRU   HANDLING CH   GENERATOR SITE SR

SR-W027   CONTAINER: Drum   Type/Size: 55-gallon

Container Matl: steel   Int. Vol/Ctnr: 0.208 m3

Liner Type: Liner Material:

Number Stored: 23825   Number Projected: 23825

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	2.9	0.0	7.2
Cellulosics	575.6	105.8	961.5
Rubber	55.2	55.2	163.5
Plastics	165.6	105.8	288.5
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	*131.0*		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	4955.5	9910.0	m3
End of 1993:	4955.5	9910.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu238	5.98E+01	Curies/m3
Pu239	1.05E+00	Curies/m3
Pu240	2.60E-01	Curies/m3
Pu241	1.25E+01	Curies/m3
Am241	1.70E+00	Curies/m3
Others	1.00E-02	Curies/m3

TYPICAL EPA CODES APPLICABLE

D001C
D003D
D004A
D006A
D007A
D008A
D009A
D011A
D018
D019
D022
D023
D024
D025
D026
F001

Comments

Other radionuclides present - activity is reported as less than 0.01 curies/m3.

Footnotes

Number of containers in storage is from "End of 1993 Projected" numbers (4955.5m3 = 23825 drums). Number of projected containers is from repackaging stored waste.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME SR

WASTE TYPE MTRU HANDLING CH GENERATOR SITE SR

F002
F003
F005A
P012
P015
P048
P113
P120
U002
U032
U052
U080
U133
U134
U144
U151C
U154
U161
U209
U211
U220
U226
U239

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **SR**

WASTE TYPE MTRU HANDLING CH GENERATOR SITE SR

WASTE STREAM

MWIR ID SR-W053

WIPP ID SR-W053

Local ID

STREAM NAME Ash

DESCRIPTION Rocky Flats Incinerator Ash

MATRIX CODE 3111

SITE FINAL FORM IDC

Waste Matrix Code Group: Solidified Inorganics

Site Matrix Description: Ash from the Rocky Flats incinerator was sent to SRS for plutonium recovery research purposes. It is stored in a satellite area in 235-F. The sample material was sent to SRS to investigate possible flow sheets for the recovery of SNM (plutonium). The ash was classified as waste by the Colorado Court System and the flow sheet experiments were cancelled.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	X	Mixed TRU	X	Rsearch and Devel. Waste	X	TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste			PCBs	
Commercial TRU Waste		Suspect Mixed TRU		Residues	X		Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME SR   WASTE TYPE MTRU   HANDLING CH   GENERATOR SITE SR

SR-W053   CONTAINER: Drum   Type/Size: 55-gallon   Container Matl: steel   Int. Vol/Ctnr: 0.208 m3   Liner Type: Liner Material: Number Stored: 0   Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	489.0	28.8	754.8
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	208.9	101.0	519.2
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.02	0.04	m3
End of 1993:	0.02	0.04	m3
1994:	0.00	0.00	m3/yr
1995:	0.00	0.00	m3/yr
1996:	0.00	0.00	m3/yr
1997:	0.00	0.00	m3/ry
1998-2002:	0.00	0.00	m3/yr
2003-2022:	0.00	0.00	m3/yr

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Pu239		Curies/m3

TYPICAL EPA CODES APPLICABLE

D004A
D005A
D006A
D007A
D008A
D009A
D010A
D011A
F001
F002
F005X

Footnotes

Pu239 activity reported as 10E+05 microcuries/gram

CAO-94-1005
Revision 1

Waste Isolation Pilot Plant Transuranic Waste Baseline Inventory Report

February 1995

Volume 3

CAO-94-1005
Revision 1

Waste Isolation Pilot Plant Transuranic Waste Baseline Inventory Report

February 1995

Prepared by WIPP Technical Assistance Contractor
for U.S. Department of Energy
under Contract No. DE-AC04-93AL-96904

Volume 3

APPENDIX B

Site-Specific Contact Handled Waste Profiles

Site Name: AMES LAB

Final Waste Form: Solidified Inorganics

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
AL-W005	0	0.1	0.1
Total Volume:	**0.00**	**0.10**	**0.10**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	528.8	394.2	173.1
Organics	Cellulose	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	Inorganic	528.6	399.0	173.1
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: ANL-E

Final Waste Form: Lead/Cadmium Metal Waste

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
AE-W041	0.7	0	0.7
AE-W042	0.4	0	0.4
Total Volume:	**1.10**	**0.00**	**1.10**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	256.1	93.1	0.0
	Aluminum Based	27.8	10.1	0.0
	Other Metals	913.5	201.7	24.7
	Other Inorganics	29.3	10.7	0.0
Organics	Cellulose	45.3	2.7	0.0
	Rubber	0.0	0.0	0.0
	Plastics	67.6	5.5	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: ANL-E

Final Waste Form: Solidified Inorganics

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
AE-T001	17.96	0.56	18.52
AE-W038	4.685	0.56	5.245
AE-W040	0.4	0	0.4
Total Volume:	**23.05**	**1.12**	**24.17**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	528.8	105.9	101.0
Organics	Cellulose	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	Inorganic	528.8	219.3	168.3
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: ANL-E

Final Waste Form: Solidified Organics

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
AE-W039	0.025	0	0.025
Total Volume:	**0.03**	**0.00**	**0.03**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	548.1	351.0	28.8
Organics	**Cellulose**	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	726.0	346.2	101.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: ANL-E

Final Waste Form: Uncategorized Metal

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
AE-T003	4.96	0.56	5.52
Total Volume:	**4.96**	**0.56**	**5.52**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	913.5	302.9	76.9
	Other Inorganics	0.0	0.0	0.0
Organics	**Cellulose**	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: ANL-W

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
AW-T001	0	3.36	3.36
Total Volume:	**0.00**	**3.36**	**3.36**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	337.3	162.5	141.3
	Aluminum Based	49.7	29.8	27.9
	Other Metals	35.0	4.5	0.1
	Other Inorganics	56.4	19.0	13.4
Organics	Cellulose	552.7	275.5	58.9
	Rubber	133.3	36.4	28.5
	Plastics	290.1	114.5	62.5
Solidified Materials	Inorganic	4.9	2.6	2.5
	Organic	2.7	0.2	0.1
Soils		8.9	2.7	2.4

Site-Specific Contact Handled Waste Profiles

Site Name: ANL-W

Final Waste Form: Lead/Cadmium Metal Waste

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
AW-M001	0	1.9	1.9
AW-M002	0.02	0.58	0.6
Total Volume:	**0.02**	**2.48**	**2.50**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.9	0.2	0.0
	Aluminum Based	0.1	0.0	0.0
	Other Metals	145.0	121.1	3.2
	Other Inorganics	320.9	39.9	0.0
Organics	Cellulose	264.0	202.5	3.8
	Rubber	190.4	23.6	0.0
	Plastics	28.7	13.6	1.0
Solidified Materials	Inorganic	237.0	180.7	2.5
	Organic	0.0	0.0	0.0
Soils		1.2	0.1	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: BT

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
BT-T002	0	15.2	15.2
BT-T003	0	108.2	108.2
BT-T004	0	0.208	0.208
BT-T005	0	0.208	0.208
Total Volume:	0.00	123.82	123.82

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	700.0	301.8	0.0
	Aluminum Based	40.0	4.3	0.0
	Other Metals	10.0	0.1	0.0
	Other Inorganics	40.0	14.1	0.0
Organics	**Cellulose**	20.0	7.1	0.0
	Rubber	10.0	0.9	0.0
	Plastics	40.0	4.3	0.0
Solidified Materials	**Inorganic**	4.8	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		10.0	0.1	0.0

001046

Site-Specific Contact Handled Waste Profiles

Site Name: ETEC

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
ET-T001	1.66	5.2	6.86
Total Volume:	**1.66**	**5.20**	**6.86**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	130.0	95.5	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	300.0	34.8	0.0
	Other Inorganics	2100.0	1549.0	5.0
Organics	Cellulose	30.0	3.9	0.0
	Rubber	30.0	3.9	0.0
	Plastics	250.0	27.3	0.0
Solidified Materials	Inorganic	60.0	21.2	0.0
	Organic	400.0	49.4	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: ETEC

Final Waste Form: Lead/Cadmium Metal Waste

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
ET-M001	0.21	0	0.21
Total Volume:	**0.21**	**0.00**	**0.21**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	185.0	185.0	185.0
	Other Inorganics	0.0	0.0	0.0
Organics	Cellulose	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: HANFORD

Final Waste Form: Combustible

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
RL-M009	19.22	239.904	259.124
RL-M010	0.42	5.505	5.925
RL-M011	0.84	10.445	11.285
RL-M012	0.21	2.743	2.953
RL-M013	0.62	7.702	8.322
RL-M014	4.6	57.781	62.381
RL-M015	15.1	189.267	204.367
RL-M016	1.67	20.915	22.585
RL-T026	116.1	2810.303	2926.403
RL-T029	367.7	8924.462	9292.162
Total Volume:	**526.48**	**12269.03**	**12795.51**

Site-Specific Contact Handled Waste Profiles

Site Name: HANFORD

Final Waste Form: Combustible

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	1048.3	25.9	0.0
	Aluminum Based	1048.3	6.5	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	0.0	0.0	0.0
Organics	Cellulose	480.8	21.0	0.0
	Rubber	211.2	10.6	0.0
	Plastics	456.1	26.1	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		192.7	5.7	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: HANFORD

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
RL-M004	4.2	565.392	569.592
RL-M006	1.63	254.063	255.693
RL-M031	0.63	7.702	8.332
RL-T101	450	0	450
RL-T102	210.45	0	210.45
RL-T104	4.95	0	4.95
RL-T105	63.5	0	63.5
RL-T106	8.07	0	8.07
RL-T107	4250	0	4250
RL-T108	28.3	0	28.3
RL-T109	15.42	0	15.42
RL-T110	402.9	0	402.9
RL-T111A	10.6	0	10.6
RL-T112	101.4	0	101.4
RL-T113	31	0	31
RL-T114	19.81	0	19.81
RL-T115	710	0	710
RL-T116	10.63	0	10.63
RL-T117	0.142	0	0.142
RL-T118	324.5	0	324.5
RL-T119	0.765	0	0.765
RL-T120	79.1	0	79.1
RL-T122	13.325	0	13.325

Site-Specific Contact Handled Waste Profiles

Site Name: HANFORD

Final Waste Form: Heterogeneous

RL-T123	0.155	0	0.155
RL-T124	0.566	0	0.566
RL-T125	12.77	0	12.77
RL-T127	232.7	0	232.7
RL-T128	0.43	0	0.43
RL-T129	10.1	0	10.1
RL-T130	11.8	0	11.8
RL-T131	35.2	0	35.2
RL-T132	0.849	0	0.849
RL-T133	28.7	0	28.7
RL-T134	0.143	0	0.143
RL-T135	0.287	0	0.287
RL-T136	0.141	0	0.141
RL-T137	135	0	135
RL-T138	40.9	0	40.9
RL-T139	146	0	146
RL-T140	9.27	0	9.27
RL-T141	100	0	100
RL-T142	0.85	0	0.85
RL-T143	54.82	0	54.82
RL-T144	416	0	416
RL-T145	107.7	0	107.7
RL-T146	191	0	191
RL-T148	0.847	0	0.847
RL-T150	291	0	291

Site-Specific Contact Handled Waste Profiles

Site Name: HANFORD

Final Waste Form: Heterogeneous

Total Volume:	8568.55	827.16	9395.71

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	706.7	561.8	0.0
	Aluminum Based	168.9	110.3	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	43.0	37.8	0.0
Organics	Cellulose	105.0	61.3	0.0
	Rubber	91.4	24.9	0.0
	Plastics	107.0	66.4	0.0
Solidified Materials	Inorganic	15.0	9.7	0.0
	Organic	0.0	0.0	0.0
Soils		18.0	9.6	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: HANFORD

Final Waste Form: Lead/Cadmium Metal Waste

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
RL-M019	1.25	0.116	1.366
RL-M020	1.88	0.174	2.054
Total Volume:	3.13	0.29	3.42

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	940.4	226.6	0.1
	Other Inorganics	0.0	0.0	0.0
Organics	**Cellulose**	67.3	11.4	0.1
	Rubber	123.8	43.8	11.2
	Plastics	86.7	28.6	1.2
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		77.0	23.6	7.2

Site-Specific Contact Handled Waste Profiles

Site Name: HANFORD

Final Waste Form: Soils

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
RL-M007	11.86	37.095	48.955
RL-T028	0.63	272.175	272.805
RL-T103	99.2	0	99.2
Total Volume:	111.69	309.27	420.96

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	38.8	2.7	0.0
	Aluminum Based	38.8	0.7	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	0.0	0.0	0.0
Organics	**Cellulose**	67.3	14.0	0.0
	Rubber	210.4	3.5	0.0
	Plastics	132.2	64.5	0.0
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		603.4	404.6	98.6

Site-Specific Contact Handled Waste Profiles

Site Name: HANFORD

Final Waste Form: Solidified Inorganics

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
RL-M032	0.21	32.462	32.672
RL-T027	1.25	2892.297	2893.547
Total Volume:	**1.46**	**2924.76**	**2926.22**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	153.9	26.7	0.0
	Aluminum Based	153.9	6.7	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	0.0	0.0	0.0
Organics	**Cellulose**	77.5	5.3	1.4
	Rubber	11.1	5.0	0.0
	Plastics	50.5	12.7	0.0
Solidified Materials	**Inorganic**	192.0	72.3	72.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: HANFORD

Final Waste Form: Solidified Organics

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
RL-M017	0.28	1.979	2.259
RL-M018	1.89	13.269	15.159
Total Volume:	2.17	15.25	17.42

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	0.0	0.0	0.0
Organics	**Cellulose**	42.9	21.0	8.6
	Rubber	0.0	0.0	0.0
	Plastics	121.1	93.8	18.9
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	83.2	39.2	32.6
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: HANFORD

Final Waste Form: Uncategorized Metal

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
RL-M001	7.14	963.725	970.865
RL-M002	11.34	1529.117	1540.457
RL-M003	3.17	424.039	427.209
RL-M008	48.2	1165.253	1213.453
RL-T025	33.5	808.814	842.314
Total Volume:	**103.35**	**4890.95**	**4994.30**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	2096.0	131.2	0.0
	Aluminum Based	915.3	32.8	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	0.0	0.0	0.0
Organics	Cellulose	139.0	8.1	0.5
	Rubber	245.6	1.4	0.0
	Plastics	750.8	20.1	1.3
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		48.7	1.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: INEL

Final Waste Form: Combustible

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
IN-W198	163.8	0	163.8
IN-W202	109.9	0	109.9
IN-W205	1.18	0	1.18
IN-W250	55.97	0	55.97
IN-W252	208	0	208
IN-W254	13.44	0	13.44
IN-W256	34.9	0	34.9
IN-W305	63.3	0	63.3
IN-W325	0.42	0	0.42
IN-W327	5.76	0	5.76
IN-W330	10.09	0	10.09
IN-W336	4.14	0	4.14
Total Volume:	**670.90**	**0.00**	**670.90**

Site-Specific Contact Handled Waste Profiles

Site Name: INEL

Final Waste Form: Combustible

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	98.6	3.9	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	474.5	33.2	0.0
	Other Inorganics	119.0	17.1	0.0
Organics	Cellulose	961.5	43.2	0.0
	Rubber	629.0	149.2	0.0
	Plastics	706.7	30.6	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: INEL

Final Waste Form: Filter

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
IN-W214	0.89	0	0.89
IN-W306.4	322.67	0	322.67
Total Volume:	**323.56**	**0.00**	**323.56**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	500.0	162.1	10.5
Organics	Cellulose	9.6	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: INEL

Final Waste Form: Graphite

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
IN-W272	1.9	0	1.9
IN-W275	8.7	0	8.7
IN-W276	532.5	0	532.5
IN-W369	16.8	0	16.8
IN-W370	90.8	0	90.8
Total Volume:	650.70	0.00	650.70

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.3	0.0	0.0
	Other Inorganics	468.0	229.9	16.9
Organics	Cellulose	9.8	4.1	0.0
	Rubber	0.0	0.0	0.0
	Plastics	51.4	4.7	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: INEL

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
IN-W169	4331	0	4331
IN-W170	0.44	1	1.44
IN-W171	3.6	0	3.6
IN-W172	165.57	0	165.57
IN-W186	2695.1	0	2695.1
IN-W189	8.2	0	8.2
IN-W197	632.7	0	632.7
IN-W203	71.9	0	71.9
IN-W204	3.2	0	3.2
IN-W225	6.1	0	6.1
IN-W259	58.8	0	58.8
IN-W265	47.8	0	47.8
IN-W269A	34.8	0	34.8
IN-W271	0.42	0	0.42
IN-W281	348	0	348
IN-W283	1	0	1
IN-W285	85	0	85
IN-W289	25.4	0	25.4
IN-W291	639	0	639
IN-W302	144.1	0	144.1
IN-W306.3	322.67	0	322.67
IN-W329	1.14	0	1.14
IN-W334	7.48	0	7.48

Site-Specific Contact Handled Waste Profiles

Site Name: INEL

Final Waste Form: Heterogeneous

IN-W345	14.6	0	14.6
IN-W351	1.48	0	1.48
Total Volume:	**9649.50**	**1.00**	**9650.50**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	1634.6	38.0	0.0
	Aluminum Based	38.2	1.2	0.0
	Other Metals	233.0	17.2	0.0
	Other Inorganics	1442.3	17.9	0.0
Organics	**Cellulose**	961.5	245.1	0.0
	Rubber	330.0	43.7	0.0
	Plastics	887.0	148.1	0.0
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		144.2	0.2	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: INEL

Final Waste Form: Inorganic Non-metal

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
IN-W161	134.9	0	134.9
IN-W230	24.7	0	24.7
IN-W240	169.1	0	169.1
IN-W243	235.7	0	235.7
IN-W245	226.7	0	226.7
IN-W247	241.7	0	241.7
IN-W249	3.46	0	3.46
IN-W366	3.43	0	3.43
IN-W374	13.2	0	13.2
Total Volume:	**1052.89**	**0.00**	**1052.89**

Site-Specific Contact Handled Waste Profiles

Site Name: INEL

Final Waste Form: Inorganic Non-metal

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	13.1	0.3	0.0
	Other Inorganics	1250.0	206.9	0.0
Organics	Cellulose	850.0	58.5	0.0
	Rubber	8.7	0.2	0.0
	Plastics	69.9	11.5	0.0
Solidified Materials	Inorganic	69.9	5.2	0.0
	Organic	0.0	0.0	0.0
Soils		865.8	0.6	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: INEL
Final Waste Form: Salt Waste

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
IN-W311	8.89	0	8.89
IN-W312	4.34	0	4.34
IN-W314	1.43	0	1.43
IN-W354	0.21	0	0.21
IN-W355	1.71	0	1.71
IN-W356	6.33	0	6.33
Total Volume:	**22.91**	**0.00**	**22.91**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	57.7	9.2	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	212.0	33.4	0.0
	Other Inorganics	625.0	166.0	2.9
Organics	**Cellulose**	26.2	3.7	0.0
	Rubber	0.0	0.0	0.0
	Plastics	35.0	4.5	0.0
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: INEL
Final Waste Form: Soils

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
IN-W263	3.8	0	3.8
Total Volume:	**3.80**	**0.00**	**3.80**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.1	0.1	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	33.9	6.4	4.6
Organics	Cellulose	19.0	19.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		671.5	613.0	457.4

Site-Specific Contact Handled Waste Profiles

Site Name: INEL

Final Waste Form: *Solidified Inorganics*

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
IN-T001	6748	0	6748
IN-W157	308	0	308
IN-W166	96.2	0	96.2
IN-W177	239.4	0	239.4
IN-W179	7.8	0	7.8
IN-W181	9.51	0	9.51
IN-W188	2.67	0	2.67
IN-W216	2581	0	2581
IN-W220	753	0	753
IN-W221	14.42	0	14.42
IN-W222	18.8	0	18.8
IN-W228	1003	0	1003
IN-W306.1	322.67	0	322.67
IN-W332	0.83	0	0.83
IN-W347	58.77	0	58.77
IN-W353	0.21	0	0.21
Total Volume:	**12164.28**	**0.00**	**12164.28**

Site-Specific Contact Handled Waste Profiles

Site Name: INEL
Final Waste Form: Solidified Inorganics

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	33.4	5.1	0.0
	Aluminum Based	23.1	0.6	0.0
	Other Metals	3.4	0.9	0.0
	Other Inorganics	754.8	87.9	0.0
Organics	Cellulose	85.2	0.5	0.0
	Rubber	1.7	0.4	0.0
	Plastics	68.3	4.0	0.0
Solidified Materials	Inorganic	973.9	544.4	0.0
	Organic	1357.0	24.8	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: INEL

Final Waste Form: Solidified Organics

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
IN-W167	222.6	0	222.6
IN-W174	206.8	0	206.8
IN-W309	483.2	0	483.2
Total Volume:	912.60	0.00	912.60

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	673.1	168.3	0.0
Organics	Cellulose	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	25.7	4.1	0.0
Solidified Materials	Inorganic	528.8	66.3	0.0
	Organic	1072.0	414.8	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: INEL

Final Waste Form: Uncategorized Metal

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
IN-W260A	11.91	0	11.91
IN-W280	48.2	0	48.2
IN-W287	212	0	212
IN-W294	492.7	0	492.7
IN-W296	4785.4	0	4785.4
IN-W298	97.9	0	97.9
IN-W300	1513	0	1513
IN-W304	80.1	0	80.1
IN-W306.2	322.67	0	322.67
IN-W371	0.21	0	0.21
Total Volume:	**7564.09**	**0.00**	**7564.09**

Site-Specific Contact Handled Waste Profiles

Site Name: INEL

Final Waste Form: Uncategorized Metal

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	764.4	120.1	0.0
	Aluminum Based	73.7	10.8	0.0
	Other Metals	538.0	114.2	0.0
	Other Inorganics	812.5	23.0	0.0
Organics	Cellulose	115.0	6.3	0.0
	Rubber	9.8	1.1	0.0
	Plastics	67.6	21.4	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: INEL

Final Waste Form: Unknown

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
IN-W308	1642.2	0	1642.2
IN-W338	1.27	0	1.27
IN-W339	11.8	0	11.8
IN-W342	0.43	0	0.43
IN-W350	0.21	0	0.21
Total Volume:	*1655.91*	*0.00*	*1655.91*

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	0.0	0.0	0.0
Organics	**Cellulose**	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: KAPL

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
KA-T001	2.4	0	2.4
Total Volume:	**2.40**	**0.00**	**2.40**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	1634.6	98.2	0.0
	Aluminum Based	1.6	0.8	0.0
	Other Metals	22.7	0.1	0.0
	Other Inorganics	24.0	2.4	0.0
Organics	**Cellulose**	184.6	80.0	0.0
	Rubber	16.4	7.3	0.0
	Plastics	149.0	64.9	0.0
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: LANL

Final Waste Form: Combustible

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
LA-T004	1515.9	1740	3255.9
LA-W004	252.43	724.6	977.03
Total Volume:	**1768.33**	**2464.60**	**4232.93**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	265.2	257.7	254.0
	Aluminum Based	0.4	0.4	0.4
	Other Metals	89.7	18.8	18.8
	Other Inorganics	6.8	6.8	6.8
Organics	**Cellulose**	68.7	64.0	59.2
	Rubber	1.2	1.1	1.0
	Plastics	5.7	5.3	4.9
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: LANL

Final Waste Form: Soils

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
LA-T008	109.37	144.6	253.97
Total Volume:	**109.37**	**144.60**	**253.97**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	0.0	0.0	0.0
Organics	Cellulose	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		1600.0	1200.0	1000.0

Site-Specific Contact Handled Waste Profiles

Site Name: LANL

Final Waste Form: Solidified Inorganics

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
LA-T006	4.52	29.5	34.02
LA-W002	3052.97	580	3632.97
LA-W003	1277.42	580	1857.42
LA-W006	513.47	.869.53	1383
Total Volume:	**4848.38**	**2059.03**	**6907.41**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	48.1	8.9	0.0
Organics	**Cellulose**	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	**Inorganic**	2180.0	1227.4	721.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: LANL

Final Waste Form: Uncategorized Metal

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
LA-T001	74.55	580.45	655
LA-T005	1449.1	1160	2609.1
LA-T007	6.87	58.1	64.97
LA-T009	42.35	57.6	99.95
LA-W001	2206.41	144.59	2351
LA-W005	212.85	725.1	937.95
LA-W009	142.67	280.33	423
Total Volume:	**4134.80**	**3006.17**	**7140.97**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	265.2	128.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	913.5	302.9	76.9
	Other Inorganics	6.8	6.3	0.0
Organics	Cellulose	68.7	27.8	0.0
	Rubber	1.2	0.5	0.0
	Plastics	5.7	2.3	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: LBL

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
LB-T001	0.84	4.42	5.26
Total Volume:	**0.84**	**4.42**	**5.26**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	800.0	390.0	40.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	850.0	425.0	50.0
	Other Inorganics	0.0	0.0	0.0
Organics	Cellulose	200.0	150.0	60.0
	Rubber	0.0	0.0	0.0
	Plastics	600.0	450.0	150.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	250.0	150.0	50.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: LLNL

Final Waste Form: Combustible

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
LL-M001	5.2	11.648	16.848
LL-T002	43.682	360.672	404.354
Total Volume:	**48.88**	**372.32**	**421.20**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	365.0	5.0	0.0
	Aluminum Based	365.0	5.0	0.0
	Other Metals	365.0	2.0	0.0
	Other Inorganics	200.0	1.0	0.0
Organics	Cellulose	365.0	100.0	0.0
	Rubber	200.0	5.0	0.0
	Plastics	365.0	100.0	5.0
Solidified Materials	Inorganic	100.0	5.0	0.0
	Organic	100.0	5.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: LLNL

Final Waste Form: Salt Waste

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
LL-T004	0.624	2.912	3.536
Total Volume:	**0.62**	**2.91**	**3.54**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	100.0	20.0	0.0
	Aluminum Based	80.0	5.0	0.0
	Other Metals	50.0	2.0	0.0
	Other Inorganics	365.0	290.0	100.0
Organics	**Cellulose**	50.0	2.0	0.0
	Rubber	20.0	1.0	0.0
	Plastics	100.0	20.0	5.0
Solidified Materials	**Inorganic**	10.0	1.0	0.0
	Organic	10.0	1.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: *LLNL*

Final Waste Form: Solidified Inorganics

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
LL-T001	12.48	59.7	72.18
LL-W019	0.823	6.448	7.271
Total Volume:	**13.30**	**66.15**	**79.45**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	100.0	30.0	0.0
	Aluminum Based	50.0	5.0	0.0
	Other Metals	20.0	1.0	0.0
	Other Inorganics	20.0	1.0	0.0
Organics	Cellulose	100.0	10.0	0.0
	Rubber	20.0	1.0	0.0
	Plastics	100.0	20.0	5.0
Solidified Materials	Inorganic	365.0	100.0	50.0
	Organic	365.0	100.0	50.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: LLNL

Final Waste Form: Uncategorized Metal

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
LL-T003	142.426	220.4	362.826
LL-W018	1.9	26.6	28.5
Total Volume:	**144.33**	**247.00**	**391.33**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	800.0	160.7	0.0
	Aluminum Based	800.0	21.6	0.0
	Other Metals	800.0	10.9	0.0
	Other Inorganics	800.0	5.4	0.0
Organics	Cellulose	500.0	5.5	0.0
	Rubber	100.0	2.3	0.0
	Plastics	200.0	4.3	0.0
Solidified Materials	Inorganic	300.0	1.9	0.0
	Organic	300.0	1.9	0.0
Soils		5.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: MOUND

Final Waste Form: Combustible

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
MD-T002	3.536	0	3.536
MD-T008	1.45	0	1.45
MD-T009	0.208	0	0.208
MD-T013	0.416	0	0.416
Total Volume:	**5.61**	**0.00**	**5.61**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	358.2	24.9	0.0
	Other Inorganics	0.0	0.0	0.0
Organics	Cellulose	50.0	1.9	0.0
	Rubber	0.0	0.0	0.0
	Plastics	850.5	269.2	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: MOUND

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
MD-T010	0.416	0	0.416
Total Volume:	**0.42**	**0.00**	**0.42**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	350.0	200.0	50.0
	Aluminum Based	200.0	100.0	5.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	350.0	200.0	50.0
Organics	Cellulose	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		150.0	100.0	10.0

Site-Specific Contact Handled Waste Profiles

Site Name: MOUND

Final Waste Form: Soils

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
MD-T003	116.88	0	116.88
MD-T005	30	0	30
Total Volume:	**146.88**	**0.00**	**146.88**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	0.0	0.0	0.0
Organics	Cellulose	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		415.7	371.9	17.8

Site-Specific Contact Handled Waste Profiles

Site Name: MOUND

Final Waste Form: Solidified Inorganics

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
MD-T001	4.784	0	4.784
MD-W002	2.496	0	2.496
Total Volume:	**7.28**	**0.00**	**7.28**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	33.4	3.2	0.0
	Aluminum Based	23.1	0.4	0.0
	Other Metals	0.5	0.1	0.0
	Other Inorganics	150.7	35.4	0.0
Organics	**Cellulose**	2.1	0.3	0.0
	Rubber	1.7	0.3	0.0
	Plastics	9.4	1.1	0.0
Solidified Materials	**Inorganic**	973.9	752.4	487.3
	Organic	20.3	4.2	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: MOUND

Final Waste Form: Uncategorized metal

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
MD-T004	21.48	0	21.48
MD-T006	59.59	0	59.59
MD-T007	5	0	5
MD-T011	16.206	0	16.206
Total Volume:	**102.28**	**0.00**	**102.28**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	680.6	440.0	0.0
	Aluminum Based	141.4	0.1	0.0
	Other Metals	466.3	0.6	0.0
	Other Inorganics	200.0	0.3	0.0
Organics	Cellulose	340.0	0.5	0.0
	Rubber	18.0	0.0	0.0
	Plastics	82.1	0.1	0.0
Solidified Materials	Inorganic	3.7	0.0	0.0
	Organic	3.7	0.0	0.0
Soils		2.9	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: MU

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
MU-W002	0.06	1.604	1.664
Total Volume:	**0.06**	**1.60**	**1.66**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	20.0	11.3	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	60.0	25.0	0.0
Organics	**Cellulose**	10.0	2.5	0.0
	Rubber	50.0	25.0	0.0
	Plastics	80.0	37.5	0.0
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: NTS

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
NT-W001	619.5	0	619.5
Total Volume:	**619.50**	**0.00**	**619.50**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	554.0	72.8	0.0
	Aluminum Based	512.0	12.4	0.0
	Other Metals	483.0	5.9	0.0
	Other Inorganics	475.0	4.9	0.0
Organics	Cellulose	318.0	52.2	0.0
	Rubber	168.0	3.8	0.0
	Plastics	318.0	49.8	1.9
Solidified Materials	Inorganic	177.0	11.7	0.0
	Organic	177.0	11.7	0.0
Soils		0.1	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: ORNL

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
OR-W044	517.4	263.9	781.3
OR-W045	3.63	0	3.63
OR-W047	151.95	0	151.95
Total Volume:	672.98	263.90	936.88

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	1716.4	96.1	0.0
	Aluminum Based	1.6	0.0	0.0
	Other Metals	21.3	0.0	0.0
	Other Inorganics	24.0	2.4	0.0
Organics	Cellulose	184.8	80.9	0.0
	Rubber	17.9	7.4	0.0
	Plastics	149.0	64.9	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	3.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: ORNL

Final Waste Form: Solidified Inorganics

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
OR-W042	110	0	110
Total Volume:	**110.00**	**0.00**	**110.00**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	0.0	0.0	0.0
Organics	**Cellulose**	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	**Inorganic**	1057.7	793.3	346.2
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: PA

Final Waste Form: Solidified Inorganics

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
PA-W014	0.75	0	0.75
PA-W015	1.2	0	1.2
PA-W015A	1.5	0	1.5
Total Volume:	3.45	0.00	3.45

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	33.4	9.2	0.7
	Aluminum Based	23.1	1.0	0.7
	Other Metals	0.5	0.4	0.4
	Other Inorganics	150.7	103.3	63.1
Organics	Cellulose	2.1	0.9	0.3
	Rubber	1.7	0.8	0.2
	Plastics	9.4	3.3	2.3
Solidified Materials	Inorganic	973.9	639.4	487.3
	Organic	20.3	12.4	6.9
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: PANTEX

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
PX-T001	0.624	0	0.624
Total Volume:	**0.62**	**0.00**	**0.62**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	95.6	87.0	78.4
Organics	**Cellulose**	0.0	0.0	0.0
	Rubber	12.4	11.3	10.2
	Plastics	12.4	11.3	10.2
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: RFP

Final Waste Form: Filter

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
RF-T066	37.7	133.52	171.22
RF-T067	1.08	0	1.08
RF-W066	43.9	520.3	564.2
RF-W067	21.28	433.77	455.05
Total Volume:	103.96	1087.59	1191.55

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	595.3	8.5	0.0
	Aluminum Based	440.7	15.2	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	342.4	48.6	0.0
Organics	Cellulose	496.1	20.2	0.0
	Rubber	11.3	0.8	0.0
	Plastics	596.6	26.9	0.0
Solidified Materials	Inorganic	427.6	54.2	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: RFP

Final Waste Form: Graphite

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
RF-T060	17.64	6.6	24.24
RF-W060	0.42	36.8	37.22
Total Volume:	**18.06**	**43.40**	**61.46**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	17.3	8.6	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	386.6	312.6	51.8
Organics	Cellulose	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: RFP

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
RF-M002	1.89	0	1.89
RF-T002	39.5	181.88	221.38
RF-T007	0.21	0	0.21
RF-T036	1.26	2	3.26
RF-W008	1.89	0	1.89
RF-W012	265.8	611.9	877.7
RF-W036	2.31	8.8	11.11
Total Volume:	**312.86**	**804.58**	**1117.44**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	865.8	2.0	0.0
Organics	**Cellulose**	681.8	64.1	0.0
	Rubber	681.8	6.1	0.0
	Plastics	681.8	18.6	0.0
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		865.8	0.1	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: RFP

Final Waste Form: Inorganic Non-metal

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
RF-T003	0	0	0
RF-T052	84.2	7.12	91.32
RF-T056	1.26	0.6	1.86
RF-T057	6.72	3.68	10.4
RF-W026	0.21	0	0.21
RF-W032	2.74	11.78	14.52
RF-W052	13.66	276.32	289.98
RF-W056	1.26	3	4.26
RF-W057	0.63	16.18	16.81
Total Volume:	**110.68**	**318.68**	**429.36**

Site-Specific Contact Handled Waste Profiles

Site Name: RFP

Final Waste Form: Inorganic Non-metal

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	23.8	0.2	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	828.4	232.3	2.2
Organics	Cellulose	9.6	1.3	0.0
	Rubber	1.1	1.0	0.0
	Plastics	53.8	18.6	0.0
Solidified Materials	Inorganic	8.3	0.0	0.0
	Organic	8.3	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: RFP

Final Waste Form: Lead/Cadmium Metal Waste

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
RF-W028	3.78	7.98	11.76
RF-W029	21.63	104.77	126.4
RF-W041	26.46	11.43	37.89
Total Volume:	**51.87**	**124.18**	**176.05**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	1438.3	39.6	0.0
	Other Inorganics	370.1	172.5	0.0
Organics	Cellulose	10.1	5.0	0.0
	Rubber	217.3	101.3	0.0
	Plastics	30.3	15.2	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: RFP

Final Waste Form: Salt Waste

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
RF-T004	0	8.6	8.6
RF-W058	9.45	48	57.45
Total Volume:	9.45	56.60	66.05

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	28.6	23.8	4.8
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	719.1	261.9	124.3
Organics	Cellulose	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: RFP

Final Waste Form: Solidified Inorganics

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
RF-M001	72.51	2790.2	2862.71
RF-T001	7.35	6.09	13.44
RF-T005	0	0	0
RF-T006	0.93	34.65	35.58
RF-T010	0.63	25.41	26.04
RF-T038	2.1	27.67	29.77
RF-T059	0	0	0
RF-T063	0	0	0
RF-T076	0	0	0
RF-W010	143.64	83.03	226.67
RF-W038	1.47	21.06	22.53
RF-W040	0	0	0
RF-W059	0	0	0
RF-W063	0	0	0
RF-W065	0	0	0
RF-W068	0	0	0
RF-W076	0	0	0
Total Volume:	**228.63**	**2988.11**	**3216.74**

Site-Specific Contact Handled Waste Profiles

Site Name: RFP

Final Waste Form: Solidified Inorganics

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	68.3	30.8	0.0
	Aluminum Based	23.1	0.0	0.0
	Other Metals	0.5	0.0	0.0
	Other Inorganics	1122.0	488.9	44.2
Organics	Cellulose	2.1	0.0	0.0
	Rubber	1.7	0.0	0.0
	Plastics	9.4	0.0	0.0
Solidified Materials	Inorganic	973.9	226.0	44.3
	Organic	567.3	4.6	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: RFP

Final Waste Form: Solidified Organics

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
RF-T069	11.97	0	11.97
RF-W013	111.3	0	111.3
RF-W069	9.53	48.82	58.35
Total Volume:	132.80	48.82	181.62

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	728.3	503.6	199.1
Organics	**Cellulose**	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	652.8	365.1	135.3
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: RFP

Final Waste Form: Uncategorized Metal

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
RF-T011	91.01	75.7	166.71
RF-T037	1.26	3.6	4.86
RF-W011	67.93	330.2	398.13
RF-W037	4.62	20	24.62
Total Volume:	164.82	429.50	594.32

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	695.4	165.7	0.0
	Aluminum Based	238.9	17.7	0.0
	Other Metals	1057.7	22.4	0.0
	Other Inorganics	79.6	19.3	0.0
Organics	Cellulose	22.3	5.2	0.0
	Rubber	0.0	0.0	0.0
	Plastics	41.0	9.6	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: SNL/NM

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
SA-T001	7	7	14
SA-W134	1.04	0	1.04
Total Volume:	**8.04**	**7.00**	**15.04**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	30.0	18.8	1.0
	Aluminum Based	5.0	2.8	0.0
	Other Metals	10.0	5.7	1.0
	Other Inorganics	20.0	14.0	1.0
Organics	Cellulose	5.0	2.9	1.0
	Rubber	5.0	2.9	1.0
	Plastics	6.0	3.9	1.0
Solidified Materials	Inorganic	60.0	37.2	0.0
	Organic	5.0	2.8	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: SRS

Final Waste Form: Combustible

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
SR-T002	4066.8	11962.5	16029.3
Total Volume:	**4066.80**	**11962.50**	**16029.30**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	7.2	2.9	0.0
Organics	Cellulose	961.5	575.6	105.8
	Rubber	163.5	55.2	55.2
	Plastics	288.5	165.6	105.8
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: SRS

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
SR-W026	222.2	2563.6	2785.8
SR-W027	9910	0	9910
Total Volume:	10132.20	2563.60	12695.80

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	7.2	2.9	0.0
Organics	Cellulose	961.5	575.6	105.8
	Rubber	163.5	55.2	55.2
	Plastics	288.5	165.6	105.8
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: SRS

Final Waste Form: Solidified Inorganics

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
SR-W053	0.04	0	0.04
Total Volume:	**0.04**	**0.00**	**0.04**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	754.8	489.0	28.8
Organics	**Cellulose**	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	**Inorganic**	519.2	208.9	101.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Contact Handled Waste Profiles

Site Name: SRS

Final Waste Form: Solidified Organics

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
SR-T001	404.8	240.7	645.5
SR-W006	0.05	0	0.05
Total Volume:	**404.85**	**240.70**	**645.55**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	673.1	548.1	206.7
Organics	Cellulose	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	485.6	394.2	149.0
Soils		0.0	0.0	0.0

Site-Specific Remote Handled Waste Profiles

Site Name: ANL-W

Final Waste Form: Filter

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
AW-M003	0.89	2.09	2.98
Total Volume:	0.89	2.09	2.98

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	241.2	232.5	214.9
Organics	Cellulose	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	8.8	8.8	8.8
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Remote Handled Waste Profiles

Site Name: ANL-W

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
AW-W020	0.59	0.08	0.67
Total Volume:	**0.59**	**0.08**	**0.67**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	337.3	162.5	141.3
	Aluminum Based	49.7	29.8	27.9
	Other Metals	35.0	4.5	0.1
	Other Inorganics	56.4	19.0	13.4
Organics	**Cellulose**	552.7	275.5	58.9
	Rubber	133.3	36.4	28.5
	Plastics	290.1	114.5	62.5
Solidified Materials	**Inorganic**	4.9	2.6	2.5
	Organic	2.7	0.2	0.1
Soils		8.9	2.7	2.4

Site-Specific Remote Handled Waste Profiles

Site Name: ANL-W

Final Waste Form: Lead/Cadmium Metal Waste

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
AW-W016	0	0.26	0.26
AW-W022	0	0.1	0.1
Total Volume:	**0.00**	**0.36**	**0.36**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	256.1	185.0	0.0
	Aluminum Based	27.8	20.1	0.0
	Other Metals	24.7	17.8	0.0
	Other Inorganics	754.8	157.0	2.3
Organics	**Cellulose**	45.3	5.3	0.0
	Rubber	0.0	0.0	0.0
	Plastics	67.6	10.9	0.0
Solidified Materials	**Inorganic**	619.2	57.5	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Remote Handled Waste Profiles

Site Name: ANL-W

Final Waste Form: Uncategorized Metal

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
AW-W018	7.06	0.88	7.94
AW-W019	0.112	0	0.112
AW-W021	0	0.48	0.48
Total Volume:	**7.17**	**1.36**	**8.53**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	256.1	256.1	256.1
	Aluminum Based	27.8	26.2	0.0
	Other Metals	24.7	23.3	0.0
	Other Inorganics	29.3	27.7	0.0
Organics	Cellulose	45.3	7.4	0.0
	Rubber	0.0	0.0	0.0
	Plastics	67.6	15.1	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Remote Handled Waste Profiles

Site Name: ANL-W

Final Waste Form: Unknown

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
AW-T002	0	23.736	23.736
Total Volume:	**0.00**	**23.74**	**23.74**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	0.0	0.0	0.0
Organics	Cellulose	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Remote Handled Waste Profiles

Site Name: BCLDP

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
BC-T001	0	71	71
Total Volume:	0.00	71.00	71.00

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	2000.0	2000.0	2000.0
Organics	Cellulose	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Remote Handled Waste Profiles

Site Name: BT

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
BT-T001	0	1.557	1.557
Total Volume:	0.00	1.56	1.56

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	500.0	425.0	350.0
	Other Inorganics	0.0	0.0	0.0
Organics	Cellulose	20.0	10.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	550.0	450.0	350.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

001113

Site-Specific Remote Handled Waste Profiles

Site Name: HANFORD

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
RL-M201	0	1727.71	1727.71
RL-T111B	0.23	0	0.23
RL-T121	25.2	0	25.2
RL-T126	4.87	0	4.87
RL-T147	2.072	0	2.072
RL-T149	0.791	0	0.791
RL-T202	0	1246	1246
Total Volume:	***33.16***	***2973.71***	***3006.87***

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	1052.0	115.7	0.7
	Aluminum Based	263.0	28.7	0.2
	Other Metals	0.0	0.0	0.0
	Other Inorganics	43.0	0.4	0.0
Organics	**Cellulose**	481.0	13.4	0.0
	Rubber	139.0	4.6	0.0
	Plastics	456.0	21.2	1.8
Solidified Materials	**Inorganic**	15.0	0.1	0.0
	Organic	0.0	0.0	0.0
Soils		193.0	2.9	0.0

001119

Site-Specific Remote Handled Waste Profiles

Site Name: INEL

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
IN-M002	0.624	2.8	3.424
IN-W139	5.43	0	5.43
IN-W269B	0.26	0	0.26
IN-W323	1.91	0	1.91
IN-W358	5.41	0	5.41
Total Volume:	**13.63**	**2.80**	**16.43**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	1634.6	125.0	0.0
	Aluminum Based	49.7	16.3	0.0
	Other Metals	35.0	2.5	0.0
	Other Inorganics	56.4	11.4	0.0
Organics	Cellulose	552.7	201.1	0.0
	Rubber	133.3	22.4	0.0
	Plastics	290.1	86.5	0.0
Solidified Materials	Inorganic	4.9	1.4	0.0
	Organic	2.7	0.1	0.0
Soils		8.9	1.4	0.0

Site-Specific Remote Handled Waste Profiles

Site Name: INEL

Final Waste Form: Lead/Cadmium Metal Waste

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
IN-M004	0	2.8	2.8
IN-M005	0	2.8	2.8
Total Volume:	0.00	5.60	5.60

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	0.9	0.9	0.9
	Aluminum Based	0.1	0.1	0.1
	Other Metals	109.6	45.2	3.2
	Other Inorganics	320.9	166.3	1.2
Organics	**Cellulose**	13.1	7.8	3.8
	Rubber	190.4	98.3	1.0
	Plastics	28.7	15.4	1.0
Solidified Materials	**Inorganic**	2.8	2.6	2.5
	Organic	0.0	0.0	0.0
Soils		1.2	0.4	0.2

Site-Specific Remote Handled Waste Profiles

Site Name: INEL

Final Waste Form: Salt Waste

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
IN-M001	0	2.8	2.8
Total Volume:	0.00	2.80	2.80

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	28.6	20.1	3.7
	Aluminum Based	3.1	0.2	0.0
	Other Metals	16.9	8.4	1.6
	Other Inorganics	591.1	239.2	106.3
Organics	Cellulose	3.8	1.0	0.0
	Rubber	0.8	0.0	0.0
	Plastics	5.2	1.9	1.1
Solidified Materials	Inorganic	0.4	0.0	0.0
	Organic	0.4	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Remote Handled Waste Profiles

Site Name: INEL

Final Waste Form: Solidified Inorganics

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
IN-W146	2.1	0	2.1
Total Volume:	**2.10**	**0.00**	**2.10**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	528.8	394.2	173.1
Organics	Cellulose	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	Inorganic	528.8	399.0	173.1
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Remote Handled Waste Profiles

Site Name: INEL

Final Waste Form: Uncategorized Metal

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
IN-M003	0	5.6	5.6
IN-W260B	2.2	0	2.2
IN-W322	1.91	0	1.91
Total Volume:	4.11	5.60	9.71

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	380.3	158.5	70.7
	Aluminum Based	141.4	16.1	3.5
	Other Metals	466.3	119.8	24.7
	Other Inorganics	34.6	15.3	2.3
Organics	Cellulose	45.3	12.5	0.0
	Rubber	18.0	0.7	0.0
	Plastics	82.1	14.0	0.0
Solidified Materials	Inorganic	3.7	0.0	0.0
	Organic	3.7	0.0	0.0
Soils		2.9	0.2	0.0

Site-Specific Remote Handled Waste Profiles

Site Name: INEL

Final Waste Form: Unknown

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
IN-W337	0.21	0	0.21
IN-W341	0.21	0	0.21
IN-W349	6.36	0	6.36
IN-W359	0.64	0	0.64
IN-W360	0.21	0	0.21
IN-W372	3.5	0	3.5
Total Volume:	11.13	0.00	11.13

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	0.0	0.0	0.0
Organics	**Cellulose**	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Remote Handled Waste Profiles

Site Name: KAPL

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
KA-W016	11.23	25.23	36.46
Total Volume:	**11.23**	**25.23**	**36.46**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	1634.6	98.2	0.0
	Aluminum Based	1.6	0.8	0.0
	Other Metals	22.7	0.1	0.0
	Other Inorganics	24.0	2.4	0.0
Organics	Cellulose	184.5	80.9	0.0
	Rubber	16.4	7.3	0.0
	Plastics	149.0	64.9	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Remote Handled Waste Profiles

Site Name: LANL

Final Waste Form: Combustible

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
LA-T010	14.84	3.16	18
Total Volume:	**14.84**	**3.16**	**18.00**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	265.2	257.7	254.0
	Aluminum Based	0.4	0.4	0.4
	Other Metals	89.7	18.8	18.8
	Other Inorganics	6.8	6.8	6.8
Organics	Cellulose	68.7	64.0	59.2
	Rubber	1.2	1.1	1.0
	Plastics	5.7	5.3	4.9
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Remote Handled Waste Profiles

Site Name: LANL

Final Waste Form: Uncategorized Metal

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
LA-T011	50.98	60	110.98
LA-T012	10.51	4.5	15.01
LA-WR01	2.1	0	2.1
LA-WR05	12.87	15	27.87
Total Volume:	76.46	79.50	155.96

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	265.2	229.4	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	913.5	302.9	76.9
	Other Inorganics	6.8	6.1	0.0
Organics	Cellulose	68.7	0.9	0.0
	Rubber	1.2	0.0	0.0
	Plastics	5.7	0.1	0.0
Solidified Materials	Inorganic	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Remote Handled Waste Profiles

Site Name: ORNL

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
OR-W040	382.81	182.7	565.51
Total Volume:	**382.81**	**182.70**	**565.51**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	1716.4	96.2	0.0
	Aluminum Based	1.6	0.0	0.0
	Other Metals	21.3	0.0	0.0
	Other Inorganics	24.0	2.4	0.0
Organics	**Cellulose**	184.8	80.9	0.0
	Rubber	17.9	7.4	0.0
	Plastics	149.0	64.9	0.0
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	3.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Remote Handled Waste Profiles

Site Name: ORNL

Final Waste Form: Solidified Inorganics

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
OR-W046	611	174	785
Total Volume:	**611.00**	**174.00**	**785.00**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	Iron Based	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	0.0	0.0	0.0
Organics	Cellulose	0.0	0.0	0.0
	Rubber	0.0	0.0	0.0
	Plastics	0.0	0.0	0.0
Solidified Materials	Inorganic	1057.7	793.3	346.2
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

Site-Specific Remote Handled Waste Profiles

Site Name: SRS

Final Waste Form: Heterogeneous

Waste Stream ID	Retrievably Stored (m3)	Projected (m3)	Total (m3)
SR-T003	0	63.92	63.92
Total Volume:	**0.00**	**63.92**	**63.92**

Material Parameters (kg/m3)		Maximum	Average	Minimum
Inorganics	**Iron Based**	0.0	0.0	0.0
	Aluminum Based	0.0	0.0	0.0
	Other Metals	0.0	0.0	0.0
	Other Inorganics	7.2	2.9	0.0
Organics	**Cellulose**	961.5	575.6	105.8
	Rubber	163.5	55.2	55.2
	Plastics	288.5	165.6	105.8
Solidified Materials	**Inorganic**	0.0	0.0	0.0
	Organic	0.0	0.0	0.0
Soils		0.0	0.0	0.0

APPENDIX C

Sandia National Laboratories

Managed and Operated by Sandia Corporation
a subsidiary of Martin Marietta Corporation
Albuquerque, New Mexico 87185-1328

date : June 24, 1994

to : P.E. Drez, [Drez Environmental Associates]

Lawrence C. Sanchez

from : L. C. Sanchez, Org 6342, MS-1328 (505)848-0685

subject : Comments on May 9, 1994 Communications

The following is a synopsis of communications that took place on May 9, 1994 [1]. In those communications you requested responses to the following two questions:

[1] In the radionuclide table (Table 3-3.1) located in SAND92-0700/3, there are a series of radionuclide inventories listed by isotope. This is the list that we have to replace in the WTWBIR. On the list, I thought that only isotopes with half-lives greater than 20 years were listed, but for instance, Cf-252 is listed which has a half-life of 2.64 years. Is this because it decays to Cm-248, which has a long half life? There are other isotopes which have half-lives greater than 20 years which are not reported in Table 3-3.1. Is this because of their overall low curie content in the inventory? If so what is the "cut-off" used as to whether an isotope appears in the table?

[2] One of the strong comments by Karen Knudtsen was that we need to put in a strong justification for the different waste parameters that will be documented in the inventory. Can one or both of you work with the PA and model development people (e.g., Larry Brush) and fill in the table attached?

Per your request [1] I had talked with several people to get responses to your two questions. The responses obtained on May 9, 1994 and relayed to you were [2]:

[1] In talking to Andy Peterson, he said that the table of radionuclides (Table 3.3-1) is a synopsis of all the available data from the sites. Any radionuclides not reported were probably due to the sites: 1) not identifying them in the waste, 2) they had been of undetectable quantities, etc. Also, the decay chains of interest (Figure 3.3-5) were those identified by SNL scientists as being the chains of interest.

[2] The matrix which identifies the justification of waste parameters was reviewed by (see attachment):

Matrix Column	Reviewer
Current Models	Palmer Vaughn Andy Peterson Jim Schreiber Barry Butcher
Under Development	Larry Brush
Possible Future	Larry Brush
Overall	(none)

REFERENCES

[1] Informal Communications from P.E. Drez [Drez Environmental Associates] to R.D. Waters (Dept. 6622) and L.C. Sanchez (Dept. 6342) dated May 9, 1994.

[2] Informal Communications from L.C. Sanchez (Dept. 6342) to P.E. Drez [Drez Environmental Associates] dated May 9, 1994.

LCS:6342:lcs/(94-2029)

Copy to (with attachment):
MS-1328, D.R. Anderson [Dept. 6342]
MS-1328, M.G. Marietta [Dept. 6342]
MS-1328, J.D. Schreiber [Dept. 6342]
MS-1328, P. Vaughn [Dept. 6342]
MS-1341, B.M. Butcher [Dept. 6345]
MS-1341, L.H. Brush [Dept. 6348]
MS-1341, A.C. Peterson [Dept. 6348]
MS-1328, Day File [Dept. 6342]
MS-1328, L.C. Sanchez [Dept. 6342]

Justification of Waste Parameters

Waste Parameter	Input Variable in Current PA Models		Input Variable in PA Model Under Development	Input Variable in Possible Future PA Model	Remaining Matrix Variable to Provide Overall Waste Form Information
Iron-Based Metals and Alloys	X	X	X	X	
Aluminum-Based Metals and Alloys		X	X	X	
Other Metals		X		X	
Other Inorganics		X	X	X	
Cellulosics	X	X	X	X	
Plastics		X	X	X	
Rubbers	1/2	X	X	X	
Solidified Inorganics		X	X	X	
Solidified Organics Matrix		X	X	X	
Soils		X	?	?	

GAS GENERATION →

MECHANICAL CHARACTERISTICS →

APPENDIX D

Instructions for Completing Table 11, TRU and TRU Mixed Waste Characterization for the WIPP TRU Waste Baseline Inventory Report (WTWBIR)

Table 11 forms have been provided to those sites with mixed waste streams listed in the Mixed Waste Inventory Report (MWIR) (DOE, 1994) or TRU waste listed in the Integrated Data Base (IDB) for 1993 (DOE, 1994d). Please review and make corrections to these forms.

NOTE: Remember the waste forms being asked for are "final waste forms" that would be shipped and emplaced in the Waste Isolation Pilot Plant (WIPP).

FIRST PAGE OF FORM

1. SITE NAME: Enter the name of your site.

   WASTE TYPE: Enter either TRU (non-mixed) or MTRU (mixed TRU).

   HANDLING: Enter either CH (contact-handled) or RH (remote-handled).

2. WASTE STREAM -

   MWIR ID: Enter the MWIR identifier or assign a new MWIR identifier for TRU or new MTRU waste streams.

   Local ID: Enter any relevant local stream identification number(s).

3. STREAM NAME: Enter the site name for the waste stream.

4. DESCRIPTION: Enter a description of the waste stream. If this stream is a new stream created from changing another waste stream into final form for WIPP, please include the identifier of the original waste stream in the MWIR or provide an equivalent number.

5. MATRIX CODE -

   Fm MWIR: If available, this number should come from the MWIR. Otherwise enter the proper waste matrix (treatment) code for the identified waste stream.

   Assigned: Leave blank. This entry is used for evaluation purposes.

   Final Waste Form Group: Of the eleven waste groups identified in the WTWBIR (e.g., Heterogeneous), select the most appropriate one for the final waste form of this waste stream and enter in this block.

   Site Matrix Description: Enter a reasonably detailed description of the waste matrix and other relevant information.

6. FINAL WASTE FORM IDC's -

   From Site: Enter the appropriate Item Description Code (IDC) (DOE, 1992) for this waste stream.

Assigned Equivalent IDC: Leave blank. This block will be used for evaluation purposes.

7. CONTAINERS - There should be a line for each container type (i.e., 55-gallon drum and/or standard waste box) in which this waste stream would be shipped to WIPP.

NOTE: For each type of waste container, there should be a continuation page.

The numbers provided for stored and projected containers were accidently incorporated from the non-radionuclide inventory database (NID) and should be ignored and replaced with the correct inventory volumes.

The standard 55-gallon drum has an internal volume of 0.208 m^3. The internal value of a standard waste box is 1.9 m^3.

8. CHECK BOXES - Please check the appropriate boxes for this waste stream, observing the notes which apply to them.

SECOND PAGE OF FORM

9. HEADER DATA on continuation sheet is repeated from page 1.

10. WASTE CONTAINER - Type: Identify the applicable container type (i.e., 55-gallon drum, standard waste box).

11. TYPICAL WASTE MATERIAL WEIGHTS FOR FINAL WASTE FORM - For the listed waste stream, identify the "typical" Average, Lower Limit, and Upper Limit estimates in kg/m^3 for each waste material parameter listed for the particular container type (i.e., 55-gallon drum or standard waste box). If the estimates are zero, enter a zero in the column. Do not leave any blanks. Include any pertinent comments in the Comment box.

12. STORED TRU WASTE AND ESTIMATED RATES OF TRU WASTE GENERATION - These dates should be entered as pairs of numbers:

- The upper number is the actual stored and projected waste volumes, identical to that reported in the MWIR for MTRU waste streams.

- The lower box is the volume of waste changed to account for its conversion into the final WIPP waste form.

NOTE: The volumes to be reported for the years 1998-2002 and 2003-2022 are per year estimates. The years 1998-2002 are for a 5-year period; the years 2003-2022 are for a 20-year period.

13. TYPICAL ISOTOPIC COMPOSITION - Enter the radionuclides and average anticipated activity (curies) for those radionuclides in the waste stream which comprise greater than 1% of the stream's activity.

14. SIGNATURE: Please print and sign your name, and date each form.

Table 11: TRU AND TRU MIXED WASTE CHARACTERIZATION FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME ( ) WASTE TYPE HANDLING Page 1 of ___

WASTE STREAM MWIR ID Local ID STREAM NAME DESCRIPTION

MATRIX CODE Fm MWIR: Assigned:

Final Waste Form Group

Site Matrix Description

FINAL WASTE FORM IDC's From Site: Assigned Equivalent IDC:

Note: List the best estimate of the type(s) of container(s) (normally Drums and Standard Waste Boxes) that your site plans to use for the final form of this waste when sent to WIPP. Each container type should have an accompanying continuation sheet estimating radiological and waste matrix constituents.

Containers (for final waste form)	Type/Size	Container Material	External Vol/Ctnr (m3)	Liner Type	Nbr Stored	Nbr Projected 1993 - 2022

PLEASE CHECK ALL OF THE FOLLOWING BOXES THAT APPLY TO THIS STREAM IN ITS FINAL FORM:

Defense TRU Waste ☐	Mixed TRU ☐	Rsearch and Devel. Waste ☐	TSCA Asbestos ☐
Non-Defense TRU Waste ☐	Non-Mixed TRU ☐	Operations Waste ☐	PCBs ☐
Commercial TRU Waste ☐	Suspect Mixed TRU ☐	Residues ☐	Other ☐
Unknown ☐	Unknown ☐	Environmental Restoration ☐	N/A ☐
(check only 1 box in this column)	(check only 1 of boxes above)	Decon and Decommissioning ☐	Unknown ☐
	Retrievably Stored ☐	From Treatment of Waste ☐	
	Buried ☐	Maintenance ☐	

D-3

CAO-94-1005, Revision 1
February 1995

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Table 11: TRU AND TRU MIXED WASTE CHARACTERIZATION FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

Continuation Page

SITE NAME ( ) *WASTE TYPE* ____ *HANDLING* ____ Page ____ of ____

WASTE STREAM *MWIR ID* ____ *STREAM NAME* ____

WASTE CONTAINER Type ____ Note: *There should be one of these continuation pages for each container listed on page 1 for this stream.*

TYPICAL WASTE MATERIAL WEIGHTS FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit	Comment
Iron-based Metal				
Aluminum-Based Metal				
Other Metals				
Other Inorganic Materials				
Cellulosics				
Rubber				
Plastics				
Solidified, Inorganic matrix				
Solidified, Organic matrix				
Soils				
Packaging Materials, Steel				
Packaging Material, Plastic				

STORED TRU WASTE AND ESTIMATED RATES OF TRU WASTE GENERATION

End of 1992: ____ m3 Projected: ____ m3

Incorporating Volume Changes for Final Waste Form >- End of 1992: ____ m3 Projected: ____ m3

	End of 1993 (m3)	1994 (m3)	1995 (m3)	1996 (m3)	1997 (m3)	1998-2002 (m3/yr)	2003-2022 (m3/yr)
Projected Actual							
In Final Waste Form							

TYPICAL ISOTOPIC COMPOSITION

Radionuclide	Typical Activity (Curies/m3)	Radionuclide	Typical Activity (Curies/m3)	Radionuclide	Typical Activity (Curies/m3)

S ure: ____________________

APPENDIX E

Site-Specific Stored Radionuclide Inventories from Draft Revision 10 IDB

Remote-Handled

APPENDIX E

RH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory

Nuclide	ANLE	HANF	INEL	KAPL	LANL	NVTS	ORNL	Total Curies
AC-225		4.89E-04	1.14E-04	7.66E-20		6.24E-14	5.41E-02	5.47E-02
AC-227		1.31E-05	1.92E-07	4.06E-20	3.44E-07	6.81E-13	2.52E-03	2.53E-03
AC-228		1.53E-03	3.03E-05	1.03E-23		2.14E-18	6.06E-04	2.17E-03
AG-110		3.13E-08	1.66E-08	1.54E-07	3.95E-09			2.05E-07
AG-110M		2.36E-06	1.25E-06	1.15E-05	2.97E-07			1.54E-05
AM-241		1.46E+02	2.37E+01	6.62E-03		4.86E-01	3.22E+01	2.03E+02
AM-243			6.91E-04				3.98E-04	1.09E-03
AM-245							4.18E-15	4.18E-15
AT-217		4.89E-04	1.14E-04	7.66E-20		6.24E-14	5.41E-02	5.47E-02
BA-137M	1.12E+01	6.31E+03	1.88E+03	2.33E+01	2.79E+03		3.69E+04	4.79E+04
BI-210		4.20E-01	1.73E-12	1.18E-17	3.36E-19	3.65E-33	2.73E-12	4.20E-01
BI-211		1.30E-05	1.88E-07	2.85E-20	3.37E-07	6.65E-13	2.42E-03	2.43E-03
BI-212		1.36E-03	1.73E-05	8.27E-25		1.16E-18	1.50E+00	1.50E+00
BI-213		4.89E-04	1.14E-04	7.66E-20		6.24E-14	5.41E-02	5.47E-02
BI-214		2.47E+00	1.87E-11	1.53E-15	7.59E-18	9.46E-32	7.61E-11	2.47E+00
BK-249							2.89E-10	2.89E-10
C-14		7.18E+02	3.99E-02				2.50E+01	7.43E+02
CD-113M		1.10E-04	1.34E-07	6.05E-09	1.03E-06			1.11E-04
CE-144		1.03E+00	2.39E+01	1.45E+00	1.03E-01		1.98E+01	4.63E+01
CF-249							1.34E-02	1.34E-02
CF-250						2.01E-01		2.01E-01
CF-252							8.48E+00	8.48E+00
CM-243			1.52E-02				3.33E+02	3.33E+02
CM-244						1.68E+02	1.78E+03	1.95E+03
CM-245							2.20E-06	2.20E-06
CM-246						3.39E-04		3.39E-04
CM-248						6.45E-09	3.89E-04	3.89E-04
CO-58		1.12E-08	5.60E-08				2.24E-26	6.72E-08
CO-60		4.77E+03	1.68E+01	1.14E-01	5.43E+00		1.73E+03	6.52E+03

RH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	ANLE	HANF	INEL	KAPL	LANL	NVTS	ORNL	Total Curies
CR-51			1.80E-32					1.80E-32
CS-134		2.45E+00	1.05E+02	5.04E-03	5.00E-02		1.09E+02	2.17E+02
CS-135		2.43E-02	2.50E-05	7.30E-07	2.02E-04			2.46E-02
CS-137	1.18E+01	6.67E+03	1.99E+03	2.47E+01	2.95E+03		3.90E+04	5.07E+04
EU-152		2.83E+02	2.07E-02	3.62E-06	5.96E-04		8.75E+03	9.04E+03
EU-154		1.43E+03	8.20E-01	3.56E-04	4.34E-02		4.57E+03	6.01E+03
EU-155		5.76E+02	3.32E-01	8.11E-03	5.45E+01		9.37E+02	1.57E+03
FE-55			1.02E+00					1.02E+00
FE-59		1.53E-12	2.86E-20				4.01E-39	1.53E-12
FR-221		4.89E-04	1.14E-04	7.66E-20		6.24E-14	5.41E-02	5.47E-02
FR-223		1.81E-07	2.64E-09	5.60E-22	4.74E-09	9.40E-15	3.47E-05	3.49E-05
H-3							1.37E+01	1.37E+01
KR-85			6.78E+00					6.78E+00
MN-54		3.45E-01	1.95E-01				2.98E-06	5.40E-01
NB-95		2.36E-10	1.51E-08	2.68E-02	6.19E-11		1.34E+00	1.37E+00
NB-95M		7.89E-13	5.06E-11	8.98E-05	2.07E-13		4.65E-03	4.74E-03
NI-63			3.56E+00					3.56E+00
NP-237		1.34E-03	7.86E-04	2.09E-09		2.87E-06	1.15E-04	2.24E-03
NP-239			6.91E-04				3.98E-04	1.09E-03
NP-240						4.92E-19	2.96E-14	2.96E-14
NP-240M						4.46E-16	2.69E-11	2.69E-11
PA-231		4.97E-05	1.19E-06	3.82E-18	2.03E-06	4.91E-12	2.95E-02	2.96E-02
PA-233		1.33E-03	7.85E-04	1.87E-09		2.86E-06	1.14E-04	2.23E-03
PA-234		1.34E-05	1.80E-06	1.17E-18	2.60E-08	1.80E-21	2.82E-03	2.84E-03
PA-234M		1.03E-02	1.38E-03	8.97E-16	2.00E-05	1.38E-18	2.17E+00	2.18E+00
PB-209		4.89E-04	1.14E-04	7.66E-20		6.24E-14	5.41E-02	5.47E-02
PB-210		4.20E-01	1.73E-12	1.18E-17	3.36E-19	3.65E-33	2.73E-12	4.20E-01
PB-211		1.30E-05	1.88E-07	2.85E-20	3.37E-07	6.65E-13	2.42E-03	2.43E-03
PB-212		1.36E-03	1.73E-05	8.27E-25		1.16E-18	1.50E+00	1.50E+00

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RH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	ANLE	HANF	INEL	KAPL	LANL	NVTS	ORNL	Total Curies
PB-214		2.47E+00	1.87E-11	1.53E-15	7.59E-18	9.46E-32	7.61E-11	2.47E+00
PD-107		3.60E-03	3.69E-06	1.08E-07	2.99E-05			3.63E-03
PM-147		8.14E+02	2.55E+01	6.84E-01	1.79E+02			1.02E+03
PO-210		3.70E-01	1.42E-12	2.85E-18	2.29E-19	2.39E-33	1.73E-12	3.70E-01
PO-211		3.55E-08	5.13E-10	7.79E-23	9.21E-10	1.82E-15	6.60E-06	6.64E-06
PO-212		8.71E-04	1.11E-05	5.30E-25		7.43E-19	9.59E-01	9.60E-01
PO-213		4.78E-04	1.12E-04	7.50E-20		6.10E-14	5.30E-02	5.35E-02
PO-214		2.47E+00	1.87E-11	1.53E-15	7.59E-18	9.46E-32	7.61E-11	2.47E+00
PO-215		1.30E-05	1.88E-07	2.85E-20	3.37E-07	6.65E-13	2.42E-03	2.43E-03
PO-216		1.36E-03	1.73E-05	8.27E-25		1.16E-18	1.50E+00	1.50E+00
PO-218		2.47E+00	1.87E-11	1.53E-15	7.59E-18	9.46E-32	7.61E-11	2.47E+00
PR-144		1.03E+00	2.39E+01	1.45E+00	1.03E-01		1.98E+01	4.63E+01
PU-238		4.74E+01	3.57E+01	8.23E-01			4.93E+02	5.77E+02
PU-239	3.53E-02	3.35E+02	2.98E+01	3.70E-04	2.27E+02	2.36E+00	2.15E+02	8.09E+02
PU-240	4.67E-02	1.66E+02	1.13E+01	4.20E-04		2.20E-01	1.07E+00	1.79E+02
PU-241	8.23E-01	4.58E+03	5.30E+01	2.00E-01		7.26E-05	1.03E-07	4.63E+03
PU-242		4.20E-03	1.02E-03	6.40E-06		2.95E-09		5.22E-03
PU-244						4.47E-16	2.69E-11	2.69E-11
RA-223		1.30E-05	1.88E-07	2.85E-20	3.37E-07	6.65E-13	2.42E-03	2.43E-03
RA-224		1.36E-03	1.73E-05	8.27E-25		1.16E-18	1.50E+00	1.50E+00
RA-225		4.91E-04	1.15E-04	8.76E-20		6.28E-14	5.46E-02	5.53E-02
RA-226		2.47E+00	1.87E-11	1.53E-15	7.59E-18	9.46E-32	7.61E-11	2.47E+00
RA-228		1.53E-03	3.03E-05	1.03E-23		2.14E-18	6.06E-04	2.17E-03
RH-106		1.94E+00	2.86E-01	2.61E-01	2.13E+01		6.30E+01	8.68E+01
RN-219		1.30E-05	1.88E-07	2.85E-20	3.37E-07	6.65E-13	2.42E-03	2.43E-03
RN-220		1.36E-03	1.73E-05	8.27E-25		1.16E-18	1.50E+00	1.50E+00
RN-222		2.47E+00	1.87E-11	1.53E-15	7.59E-18	9.46E-32	7.61E-11	2.47E+00
RU-106		1.94E+00	2.86E-01	2.61E-01	2.13E+01		6.30E+01	8.68E+01
SB-125		1.12E+01	1.62E+00	7.89E-03	1.18E+02			1.31E+02

RH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	ANLE	HANF	INEL	KAPL	LANL	NVTS	ORNL	Total Curies
SB-126		6.55E-03	6.71E-06	1.96E-07	5.44E-05			6.61E-03
SB-126M		4.68E-02	4.79E-05	1.40E-06	3.89E-04			4.72E-02
SE-79		2.11E-02	2.17E-05	6.33E-07	1.76E-04			2.13E-02
SM-151		7.38E+01	7.76E-02	2.44E-03	6.25E-01			7.45E+01
SN-119M		3.34E-05	1.95E-05	1.97E-04	4.34E-06			2.55E-04
SN-121M		1.38E+00	1.48E-03	4.93E-05	1.19E-02			1.39E+00
SN-126		4.68E-02	4.79E-05	1.40E-06	3.89E-04			4.72E-02
SR-90		5.74E+03	1.78E+03	2.46E+01	2.69E+03		9.71E+04	1.07E+05
TA-182			1.22E-05					1.22E-05
TC-99		1.21E+00	1.24E-03	3.64E-05	1.01E-02			1.22E+00
TE-125M		3.82E-14	3.19E-12	3.51E-05	4.88E+01			4.88E+01
TE-127		8.34E-08	6.35E-07	1.66E-03	1.44E-08			1.66E-03
TE-127M		8.54E-08	6.51E-07	1.70E-03	1.47E-08			1.70E-03
TH-227		1.31E-05	1.89E-07	3.28E-20	3.40E-07	6.71E-13	2.46E-03	2.47E-03
TH-228		1.36E-03	1.73E-05	8.70E-25		1.16E-18	1.50E+00	1.50E+00
TH-229		4.93E-04	1.16E-04	1.05E-19		6.34E-14	5.54E-02	5.60E-02
TH-230		2.17E-04	1.28E-08	1.06E-11	8.90E-15	1.46E-28	1.16E-07	2.17E-04
TH-231	4.22E-06	1.23E-01	5.41E-03	3.64E-13	8.31E-03	3.24E-08	3.67E+02	3.67E+02
TH-232		1.98E-03	7.50E-05	3.07E-22		7.92E-18	1.00E-03	3.06E-03
TH-234		1.03E-02	1.38E-03	8.98E-16	2.00E-05	1.39E-18	2.17E+00	2.18E+00
TL-207		1.30E-05	1.87E-07	2.84E-20	3.36E-07	6.63E-13	2.41E-03	2.42E-03
TL-208		4.89E-04	6.20E-06	2.97E-25		4.16E-19	5.38E-01	5.39E-01
TL-209		1.06E-05	2.46E-06	1.66E-21		1.35E-15	1.17E-03	1.18E-03
TL-210		5.18E-04	3.92E-15	3.20E-19	1.59E-21	1.99E-35	1.60E-14	5.18E-04
U-232							1.92E+00	1.92E+00
U-233		4.55E-01	2.41E-01	3.67E-15		1.12E-10	1.42E+02	1.42E+02
U-234		1.28E+00	4.40E-04	2.34E-06	3.35E-10	8.94E-24	5.88E-03	1.28E+00
U-235	4.22E-06	1.23E-01	5.41E-03	3.64E-13	8.31E-03	3.24E-08	3.67E+02	3.67E+02
U-236		7.63E-05	2.85E-06	1.24E-11		3.83E-08	1.25E-07	7.93E-05
U-237	2.02E-05	1.12E-01	1.30E-03	4.90E-06		1.78E-09	2.52E-12	1.14E-01
U-238		1.03E-02	1.38E-03	9.93E-16	2.00E-05	1.43E-18	2.17E+00	2.18E+00

RH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	ANLE	HANF	INEL	KAPL	LANL	NVTS	ORNL	Total Curies
U-240						4.46E-16	2.69E-11	2.69E-11
Y-90		5.74E+03	1.78E+03	2.46E+01	2.69E+03		9.71E+04	1.07E+05
ZR-93		2.73E-01	2.80E-04	8.19E-06	2.27E-03			2.76E-01
ZR-95		1.06E-10	6.82E-09	1.21E-02	2.79E-11		6.27E-01	6.39E-01
Total	2.39E+01	3.84E+04	7.79E+03	1.03E+02	1.18E+04	1.71E+02	2.90E+05	3.49E+05

Site-Specific Stored Radionuclide Inventories from Draft Revision 10 IDB

Contact-Handled

001148

CH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory

Nuclide	ANLE	ETEC	HANF	INEL
AC-225	8.22E-06		1.13E-01	1.34E+00
AC-227	3.78E-13		4.47E-05	4.11E-02
AC-228	2.45E-17		5.05E-02	3.02E-01
AG-109M				
AG-110			1.82E-06	1.42E-08
AG-110M			1.37E-04	1.07E-06
AM-241	5.73E+00	4.43E-01	2.98E+03	8.98E+04
AM-242				
AM-242M				
AM-243	9.52E-02		9.10E-02	3.79E-01
AM-245				5.43E-09
AT-217	8.22E-06		1.13E-01	1.34E+00
BA-137M		2.27E-01	6.65E+02	5.98E+01
BI-210	3.64E-06		5.38E-02	2.56E-02
BI-211	3.52E-13		4.42E-05	4.13E-02
BI-212	8.05E-18		2.00E-01	2.66E+01
BI-213	8.22E-06		1.13E-01	1.34E+00
BI-214	1.19E-04		3.16E-01	4.80E-02
BK-249				3.74E-04
BK-250				
C-14			5.88E+00	1.66E-01
CD-109				
CD-113M			1.44E-05	3.72E-08
CE-144			2.66E+01	1.98E-01
CF-249				1.02E-02
CF-250				
CF-251				
CF-252			5.96E+01	3.69E-03
CM-242				6.08E-07

CH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	ANLE	ETEC	HANF	INEL
CM-243			6.88E-02	
CM-244			1.07E+02	5.31E+02
CM-245			1.68E+01	7.36E-06
CM-246				1.53E-03
CM-247				
CM-248			7.64E-03	4.61E-07
CO-58			1.79E-05	1.57E-11
CO-60			2.32E+01	8.13E+01
CS-134			.1.90E+00	2.48E-03
CS-135			2.39E-03	8.53E-06
CS-137		2.40E-01	7.03E+02	6.32E+01
ES-254				
EU-150				3.64E-05
EU-152			1.97E+00	1.80E-01
EU-154			9.47E+00	7.56E-01
EU-155			1.30E+01	5.08E-01
FE-55				3.25E-05
FE-59			9.20E-06	2.64E-16
FR-221	8.22E-06		1.13E-01	1.34E+00
FR-223	5.21E-15		6.17E-07	5.67E-04
H-3			3.08E-08	8.91E-01
I-129			4.16E-10	
KR-85				
MN-54			1.99E-03	4.30E-03
NB-95			1.61E-01	6.88E-06
NB-95M			5.39E-04	2.30E-08
NI-59				
NI-63				9.20E-05
NP-237	1.53E-03		2.61E-01	7.94E-01
NP-238				

CH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	ANLE	ETEC	HANF	INEL
NP-239	9.52E-02		9.10E-02	3.79E-01
NP-240			5.07E-13	3.05E-17
NP-240M			4.60E-10	2.77E-14
PA-231			1.91E-04	1.06E-05
PA-233	6.15E-07		2.61E-01	7.91E-01
PA-234	9.89E-15		7.87E-03	1.50E-04
PA-234M	7.60E-12		6.04E+00	1.16E-01
PB-209	8.22E-06		1.13E-01	1.34E+00
PB-210	3.64E-06		5.38E-02	2.56E-02
PB-211	3.52E-13		4.42E-05	4.13E-02
PB-212	8.05E-18		2.00E-01	2.66E+01
PB-214	1.19E-04		3.16E-01	4.80E-02
PD-107			3.53E-04	1.26E-06
PM-147			4.04E+02	4.48E+00
PO-210	1.85E-06		4.73E-02	2.43E-02
PO-211	9.60E-16		1.21E-07	1.13E-04
PO-212	5.16E-18		1.28E-01	1.71E+01
PO-213	8.04E-06		1.11E-01	1.31E+00
PO-214	1.19E-04		3.16E-01	4.80E-02
PO-215	3.52E-13		4.42E-05	4.13E-02
PO-216	8.05E-18		2.00E-01	2.66E+01
PO-218	1.19E-04		3.16E-01	4.80E-02
PR-144			2.66E+01	1.98E-01
PU-236				1.68E-02
PU-238	2.14E+00	1.12E-01	8.18E+04	6.07E+04
PU-239	3.28E+01	1.76E+00	2.70E+04	4.01E+04
PU-240	9.42E+00	6.01E-01	6.06E+03	9.82E+03
PU-241	5.98E+01	8.06E+00	9.43E+04	1.65E+05
PU-242	1.00E-02	4.00E-05	3.70E-01	9.44E-01
PU-243				

001151

CH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	ANLE	ETEC	HANF	INEL
PU-244			4.61E-10	2.78E-14
RA-223	3.52E-13		4.42E-05	4.13E-02
RA-224	8.05E-18		2.00E-01	2.66E+01
RA-225	8.33E-06		1.14E-01	1.34E+00
RA-226	1.19E-04		3.16E-01	4.80E-02
RA-228	2.45E-17		5.05E-02	3.02E-01
RH-106			1.30E+01	4.80E-02
RN-219	3.52E-13		4.42E-05	4.13E-02
RN-220	8.05E-18		2.00E-01	2.66E+01
RN-222	1.19E-04		3.16E-01	4.80E-02
RU-106			1.30E+01	4.80E-02
SB-125			5.09E+00	6.16E-03
SB-126			6.42E-04	2.30E-06
SB-126M			4.58E-03	1.64E-05
SE-79			2.07E-03	7.40E-06
SM-151			7.57E+00	2.56E-02
SN-119M			2.21E-03	1.76E-05
SN-121M			1.47E-01	4.76E-04
SN-126			4.58E-03	1.64E-05
SR-90		2.30E-01	7.11E+02	2.17E+00
TC-99			1.19E-01	2.19E-03
TE-125M			2.13E-04	3.97E-09
TE-127			9.99E-03	1.12E-05
TE-127M			1.02E-02	1.15E-05
TH-227	3.61E-13		4.44E-05	4.12E-02
TH-228	8.13E-18		1.99E-01	2.66E+01
TH-229	8.50E-06		1.14E-01	1.35E+00
TH-230	7.02E-10		6.91E-03	2.07E-02
TH-231	5.95E-04		5.68E-01	6.17E-02
TH-232	1.63E-16		6.38E-02	3.30E-01

CH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	ANLE	ETEC	HANF	INEL
TH-234	7.61E-12		6.05E+00	1.16E-01
TL-207	3.51E-13		4.41E-05	4.11E-02
TL-208	2.89E-18		7.18E-02	9.56E+00
TL-209	1.78E-07		2.45E-03	2.89E-02
TL-210	2.50E-08		6.63E-05	1.01E-05
U-232				2.58E+01
U-233	3.00E-02		7.92E+01	8.98E+02
U-234	3.10E-05		5.14E+01	5.83E+00
U-235	5.95E-04		5.68E-01	6.17E-02
U-236	1.35E-06		2.13E-03	4.68E-03
U-237	1.47E-03	1.97E-04	2.31E+00	4.04E+00
U-238	5.33E-05		6.05E+00	1.16E-01
U-240			4.60E-10	2.77E-14
Y-90		2.30E-01	7.11E+02	2.17E+00
ZN-65				1.21E-08
ZR-93			2.68E-02	9.58E-05
ZR-95			7.27E-02	3.10E-06
Total	1.10E+02	1.19E+01	2.16E+05	3.67E+05

Nuclide	LBL	LLNL	LANL	MOUND
AC-225	4.50E-06	1.90E-13	7.18E-02	
AC-227	1.02E-16	1.80E-12	2.47E-01	4.28E-11
AC-228	1.00E-19	5.07E-17	1.46E-03	
AG-109M			1.95E+01	
AG-110			3.07E-11	
AG-110M			2.31E-09	
AM-241	9.20E-02	1.26E+02	8.70E+03	
AM-242		3.93E-03		
AM-242M		3.95E-03		

CH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	LBL	LLNL	LANL	MOUND
AM-243	3.85E-02	5.23E-03	4.75E+00	
AM-245	1.75E-13		9.49E-15	
AT-217	4.50E-06	1.90E-13	7.18E-02	
BA-137M		1.89E-06	5.03E+01	
BI-210	7.39E-03	4.29E-14	2.40E-01	3.53E-10
BI-211	9.53E-17	1.57E-12	2.48E-01	4.18E-11
BI-212	5.20E-20	4.20E-09	1.13E-03	
BI-213	4.50E-06	1.90E-13	7.18E-02	
BI-214	3.37E-02	1.19E-12	9.02E-01	3.05E-09
BK-249	1.21E-08		6.54E-10	
BK-250	5.44E-07			
C-14			5.00E-04	
CD-109			1.95E+01	
CD-113M			8.62E-07	
CE-144			9.09E-04	
CF-249	3.11E-03		9.67E-04	
CF-250	2.19E-04			
CF-251			1.58E-03	
CF-252				
CM-242		8.39E-04	7.61E-16	
CM-243			4.49E-01	
CM-244	2.20E-02	3.21E+01	1.68E+02	
CM-245	1.76E-06		1.44E-06	
CM-246	3.71E-07	6.22E-04	4.01E-02	
CM-247			1.20E-09	
CM-248				
CO-58			1.11E-08	
CO-60			2.29E-02	
CS-134			8.77E-03	
CS-135			2.17E-04	

001154

CH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	LBL	LLNL	LANL	MOUND
CS-137		1.99E-06	5.32E+01	
ES-254	5.44E-07			
EU-150				
EU-152		1.19E-06	9.18E-04	
EU-154		3.75E-07	3.38E-02	
EU-155			3.23E-01	
FE-55				
FE-59			1.04E-10	
FR-221	4.50E-06	1.90E-13	7.18E-02	
FR-223	1.41E-18	2.49E-14	3.40E-03	5.90E-13
H-3				
I-129				
KR-85				
MN-54			3.08E-04	
NB-95			9.98E-09	
NB-95M			3.34E-11	
NI-59				
NI-63				
NP-237	7.22E-03	4.04E-04	2.69E-02	
NP-238		1.98E-05		
NP-239	3.85E-02	5.23E-03	4.75E+00	
NP-240				
NP-240M				
PA-231	2.00E-15	5.71E-11	1.20E-03	2.97E-10
PA-233	7.22E-03	4.00E-04	2.64E-02	
PA-234	1.97E-14	4.43E-07	5.26E-06	
PA-234M	1.51E-11	3.40E-04	4.04E-03	
PB-209	4.50E-06	1.90E-13	7.18E-02	
PB-210	7.39E-03	4.29E-14	2.40E-01	3.53E-10
PB-211	9.53E-17	1.57E-12	2.48E-01	4.18E-11

CH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	LBL	LLNL	LANL	MOUND
PB-212	5.20E-20	4.20E-09	1.13E-03	
PB-214	3.37E-02	1.19E-12	9.02E-01	3.05E-09
PD-107			3.21E-05	
PM-147			3.58E+00	
PO-210	6.67E-03	2.74E-14	2.20E-01	2.98E-10
PO-211	2.60E-19	4.28E-15	6.76E-04	1.14E-13
PO-212	3.33E-20	2.69E-09	7.24E-04	
PO-213	4.40E-06	1.86E-13	7.03E-02	
PO-214	3.37E-02	1.19E-12	9.02E-01	3.05E-09
PO-215	9.53E-17	1.57E-12	2.48E-01	4.18E-11
PO-216	5.20E-20	4.20E-09	1.13E-03	
PO-218	3.37E-02	1.19E-12	9.02E-01	3.05E-09
PR-144			9.09E-04	
PU-236				
PU-238	2.36E-04	1.97E+01	1.15E+05	7.16E+02
PU-239	7.70E-03	1.46E+02	7.33E+04	1.99E+02
PU-240	5.07E-03	6.06E+01	1.52E-01	
PU-241	2.89E-07	1.67E+03	1.77E+00	
PU-242	1.01E-02	1.92E-02	5.08E+02	
PU-243			1.20E-09	
PU-244				
RA-223	9.53E-17	1.57E-12	2.48E-01	4.18E-11
RA-224	5.20E-20	4.20E-09	1.13E-03	
RA-225	4.51E-06	1.97E-13	7.20E-02	
RA-226	3.37E-02	1.19E-12	9.02E-01	3.05E-09
RA-228	1.00E-19	5.07E-17	1.46E-03	
RH-106			4.17E-03	
RN-219	9.53E-17	1.57E-12	2.48E-01	4.18E-11
RN-220	5.20E-20	4.20E-09	1.13E-03	
RN-222	3.37E-02	1.19E-12	9.02E-01	3.05E-09

CH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	LBL	LLNL	LANL	MOUND
RU-106			4.17E-03	
SB-125		4.08E-08	5.05E-02	
SB-126			5.84E-05	
SB-126M			4.17E-04	
SE-79			1.88E-04	
SM-151			6.44E-01	
SN-119M			3.47E-08	
SN-121M			1.18E-02	
SN-126			4.17E-04	
SR-90			4.92E+01	
TC-99			1.08E-02	
TE-125M			5.27E-08	
TE-127			1.51E-08	
TE-127M			1.55E-08	
TH-227	9.79E-17	1.66E-12	2.47E-01	4.22E-11
TH-228	5.22E-20	4.17E-09	1.13E-03	
TH-229	4.54E-06	2.09E-13	7.22E-02	
TH-230	7.71E-14	1.86E-09	3.90E-04	1.37E-06
TH-231	3.79E-11	1.32E-04	4.18E-01	2.06E-06
TH-232	3.69E-19	3.70E-16	2.40E-03	
TH-234	1.52E-11	3.41E-04	4.05E-03	
TL-207	9.50E-17	1.56E-12	2.47E-01	4.17E-11
TL-208	1.87E-20	1.51E-09	4.06E-04	
TL-209	9.71E-08	4.10E-15	1.55E-03	
TL-210	7.07E-06	2.49E-16	1.89E-04	6.41E-13
U-232				
U-233	4.81E-03	2.19E-09	4.46E+01	
U-234	3.41E-09	1.10E-04	5.19E+00	2.19E-02
U-235	3.79E-11	1.32E-04	4.18E-01	2.06E-06
U-236	1.50E-09	3.92E-06	1.95E-08	

CH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	LBL	LLNL	LANL	MOUND
U-237	7.07E-12	4.10E-02	4.34E-05	
U-238	1.53E-11	3.53E-04	4.05E-03	
U-240				
Y-90			4.92E+01	
ZN-65				
ZR-93			2.43E-03	
ZR-95			4.50E-09	
Total	4.60E-01	2.06E+03	1.98E+05	9.14E+02

Nuclide	NVTS	ORNL	PADU	PANTEX
AC-225	2.05E-03	1.19E-01		
AC-227	1.90E-04	3.11E-07		
AC-228	8.75E-17	3.03E-02		
AG-109M				
AG-110	2.22E-10	5.96E-12		
AG-110M	1.67E-08	4.48E-10		
AM-241	2.84E+02	2.33E+03		
AM-242				
AM-242M				
AM-243	1.22E+00	9.35E+00		
AM-245	2.57E-13	2.67E-09		
AT-217	2.05E-03	1.19E-01		
BA-137M	3.76E-01	2.06E+03		
BI-210	5.53E-02	9.95E-02		
BI-211	1.89E-04	3.07E-07		
BI-212	1.62E-02	2.94E-01		
BI-213	2.05E-03	1.19E-01		
BI-214	2.50E-01	1.61E+00		
BK-249	1.77E-08	1.84E-04		

001158

CH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	NVTS	ORNL	PADU	PANTEX
BK-250	2.57E-10			
C-14	2.50E-04			
CD-109				
CD-113M	7.56E-09	2.94E-08		
CE-144	5.03E-03	1.66E-04		
CF-249	1.14E-02	1.12E+00		
CF-250	3.53E-01			
CF-251				
CF-252	2.88E-02	4.05E-01		
CM-242		3.15E-03		
CM-243				
CM-244	2.46E+02	1.25E+03		
CM-245	7.57E-06	1.64E-03		
CM-246	5.15E-04			
CM-247				
CM-248	3.48E-06	1.96E-02		
CO-58				
CO-60		1.22E-02		
CS-134	8.34E-04	1.40E-04		
CS-135	1.27E-06	9.22E-06		
CS-137	3.97E-01	2.17E+03		
ES-254	2.57E-10			
EU-150				
EU-152	1.17E+00	1.68E-05		
EU-154	5.03E-01	8.94E-04		
EU-155	5.31E-03	6.43E-03		
FE-55				
FE-59		1.44E-02		
FR-221	2.05E-03	1.19E-01		
FR-223	2.62E-06	4.30E-09		

001159

CH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	NVTS	ORNL	PADU	PANTEX
H-3	7.18E-02			
I-129				
KR-85	2.24E-01			
MN-54				
NB-95	4.37E-14	2.33E-16		
NB-95M	1.46E-16	7.77E-19		
NI-59				
NI-63		1.11E-04		
NP-237	5.59E-03	6.03E+00	5.49E+01	
NP-238				
NP-239	1.22E+00	9.35E+00		
NP-240	1.10E-09	8.71E-13		
NP-240M	9.99E-07	7.91E-10		
PA-231	5.00E-04	1.56E-06		
PA-233	5.58E-03	6.03E+00		
PA-234	7.26E-08	3.42E-05		
PA-234M	5.58E-05	2.63E-02		
PB-209	2.05E-03	1.19E-01		
PB-210	5.53E-02	9.95E-02		
PB-211	1.89E-04	3.07E-07		
PB-212	1.62E-02	2.94E-01		
PB-214	2.50E-01	1.61E+00		
PD-107	1.88E-07	1.36E-06		
PM-147	1.87E-01	7.20E-02		
PO-210	4.99E-02	7.06E-02		
PO-211	5.15E-07	8.37E-10		
PO-212	1.04E-02	1.88E-01		
PO-213	2.00E-03	1.16E-01		
PO-214	2.50E-01	1.60E+00		
PO-215	1.89E-04	3.07E-07		

CH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	NVTS	ORNL	PADU	PANTEX
PO-216	1.62E-02	2.94E-01		
PO-218	2.50E-01	1.61E+00		
PR-144	5.03E-03	1.66E-04		
PU-236				
PU-238	1.98E+02	6.78E+03		
PU-239	2.76E+03	7.95E+02	5.56E+01	5.55E-02
PU-240	1.87E+01	7.25E+02		
PU-241	2.64E+02	5.52E+04		
PU-242	8.70E-02	5.46E+00		
PU-243				
PU-244	1.00E-06	7.92E-10		
RA-223	1.89E-04	3.07E-07		
RA-224	1.62E-02	2.94E-01		
RA-225	2.06E-03	1.19E-01		
RA-226	2.50E-01	1.61E+00		
RA-228	8.75E-17	3.03E-02		
RH-106	3.90E-03	1.87E-04		
RN-219	1.89E-04	3.07E-07		
RN-220	1.62E-02	2.94E-01		
RN-222	2.50E-01	1.61E+00		
RU-106	3.90E-03	1.87E-04		
SB-125	2.38E-03	8.38E-04		
SB-126	3.42E-07	2.48E-06		
SB-126M	2.44E-06	1.77E-05		
SE-79	1.10E-06	8.00E-06		
SM-151	4.03E-03	2.64E-02		
SN-119M	2.49E-07	6.44E-09		
SN-121M	7.80E-05	4.71E-04		
SN-126	2.44E-06	1.77E-05		
SR-90	3.44E-01	1.29E+03		

CH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	NVTS	ORNL	PADU	PANTEX
TC-99	6.34E-05	1.78E+01		
TE-125M	3.28E-18	1.73E-20		
TE-127	2.52E-10	1.72E-12		
TE-127M	2.58E-10	1.76E-12		
TH-227	1.89E-04	3.08E-07		
TH-228	1.62E-02	2.94E-01		
TH-229	2.07E-03	1.19E-01		
TH-230	7.98E-07	6.52E-04		
TH-231	5.61E-05	6.56E-03		
TH-232	4.59E-16	3.42E-02		
TH-234	5.59E-05	2.63E-02		
TL-207	1.88E-04	3.06E-07		
TL-208	5.82E-03	1.06E-01		
TL-209	4.42E-05	2.56E-03		
TL-210	5.24E-05	3.37E-04		
U-232	1.68E-02	2.88E-01		
U-233	1.81E+00	8.93E+01		
U-234	1.15E-02	8.90E+00		
U-235	5.61E-05	6.56E-03		
U-236	3.08E-06	2.43E-04		
U-237	6.46E-03	1.35E+00		
U-238	5.59E-05	3.53E-02		
U-240	9.99E-07	7.91E-10		
Y-90	3.44E-01	1.29E+03		
ZN-65				
ZR-93	1.43E-05	1.04E-04		
ZR-95	1.97E-14	1.05E-16		
Total	3.78E+03	7.41E+04	1.11E+02	5.55E-02

CH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	RFP	SNLA	SRS	MURR	Total Curies
AC-225	9.37E-12	1.26E-19	1.13E-05		1.65E+00
AC-227	4.81E-11	5.83E-21	2.92E-07		2.88E-01
AC-228	3.36E-15		8.72E-03		3.93E-01
AG-109M					1.95E+01
AG-110					1.83E-06
AG-110M					1.38E-04
AM-241	1.08E+04	1.00E-02	1.60E+04	4.80E-02	1.31E+05
AM-242					3.93E-03
AM-242M					3.95E-03
AM-243			7.55E-01		1.67E+01
AM-245					8.09E-09
AT-217	9.37E-12	1.26E-19	1.13E-05		1.65E+00
BA-137M			6.41E-01		2.83E+03
BI-210	1.06E-12		7.89E-07		4.82E-01
BI-211	4.43E-11	5.18E-21	2.87E-07		2.89E-01
BI-212	9.05E-16		8.08E-03		2.71E+01
BI-213	9.37E-12	1.26E-19	1.13E-05		1.65E+00
BI-214	2.94E-11		5.54E-06		3.15E+00
BK-249					5.58E-04
BK-250					5.44E-07
C-14					6.05E+00
CD-109					1.95E+01
CD-113M					1.53E-05
CE-144			5.37E-12		2.68E+01
CF-249					1.15E+00
CF-250					3.54E-01
CF-251					1.58E-03
CF-252			6.12E-01		6.06E+01

CH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	RFP	SNLA	SRS	MURR	Total Curies
CM-242					3.99E-03
CM-243					5.18E-01
CM-244			6.57E+02		2.99E+03
CM-245					1.68E+01
CM-246					4.28E-02
CM-247					1.20E-09
CM-248			1.59E-04		2.74E-02
CO-58					1.79E-05
CO-60			5.90E-02		1.05E+02
CS-134					1.91E+00
CS-135					2.62E-03
CS-137			6.77E-01		3.00E+03
ES-254					5.44E-07
EU-150					3.64E-05
EU-152					3.32E+00
EU-154			3.34E-04		1.08E+01
EU-155			4.14E-06		1.39E+01
FE-55					3.25E-05
FE-59					1.44E-02
FR-221	9.37E-12	1.26E-19	1.13E-05		1.65E+00
FR-223	6.64E-13	8.04E-23	4.02E-09		3.98E-03
H-3					9.62E-01
I-129					4.16E-10
KR-85					2.24E-01
MN-54			5.03E-10		6.60E-03
NB-95					1.61E-01
NB-95M					5.39E-04
NI-59			1.25E-03		1.25E-03
NI-63			1.55E-01		1.55E-01
NP-237	9.97E-03	3.25E-09	8.62E+00	1.80E-04	7.07E+01

CH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	RFP	SNLA	SRS	MURR	Total Curies
NP-238					1.98E-05
NP-239			7.55E-01		1.67E+01
NP-240			1.47E-14		1.10E-09
NP-240M			1.34E-11		1.00E-06
PA-231	1.09E-09	1.87E-19	1.44E-06		1.90E-03
PA-233	9.59E-03	2.90E-09	8.61E+00		1.57E+01
PA-234			6.76E-06		8.06E-03
PA-234M			5.19E-03		6.19E+00
PB-209	9.37E-12	1.26E-19	1.13E-05		1.65E+00
PB-210	1.06E-12		7.89E-07		4.82E-01
PB-211	4.43E-11	5.18E-21	2.87E-07		2.89E-01
PB-212	9.05E-16		8.08E-03		2.71E+01
PB-214	2.94E-11		5.54E-06		3.15E+00
PD-107					3.88E-04
PM-147			2.10E-05		4.13E+02
PO-210	6.81E-13		6.85E-07		4.19E-01
PO-211	1.21E-13	1.41E-23	7.84E-10		7.89E-04
PO-212	5.80E-16		5.18E-03		1.74E+01
PO-213	9.17E-12	1.23E-19	1.11E-05		1.61E+00
PO-214	2.94E-11		5.54E-06		3.15E+00
PO-215	4.43E-11	5.18E-21	2.87E-07		2.89E-01
PO-216	9.05E-16		8.08E-03		2.71E+01
PO-218	2.94E-11		5.54E-06		3.15E+00
PR-144			5.37E-12		2.68E+01
PU-236					1.68E-02
PU-238	3.47E+02		4.71E+05		7.37E+05
PU-239	9.93E+03	2.00E-06	8.56E+03	2.05E-02	1.63E+05
PU-240	7.21E+03		2.12E+03		2.60E+04
PU-241	5.72E+04		6.30E+04		4.37E+05
PU-242			3.75E-01		5.16E+02

CH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	RFP	SNLA	SRS	MURR	Total Curies
PU-243					1.20E-09
PU-244			1.34E-11		1.00E-06
RA-223	4.43E-11	5.18E-21	2.87E-07		2.89E-01
RA-224	9.05E-16		8.08E-03		2.71E+01
RA-225	9.64E-12	1.43E-19	1.14E-05		1.65E+00
RA-226	2.94E-11		5.54E-06		3.15E+00
RA-228	3.36E-15		8.72E-03		3.93E-01
RH-106			8.43E-10		1.31E+01
RN-219	4.43E-11	5.18E-21	2.87E-07		2.89E-01
RN-220	9.05E-16		8.08E-03		2.71E+01
RN-222	2.94E-11		5.54E-06		3.15E+00
RU-106			8.43E-10		1.31E+01
SB-125			4.31E-05		5.15E+00
SB-126					7.05E-04
SB-126M					5.04E-03
SE-79			1.25E-07		2.28E-03
SM-151			3.18E-04		8.27E+00
SN-119M					2.22E-03
SN-121M					1.60E-01
SN-126					5.04E-03
SR-90			1.24E-02		2.06E+03
TC-99			4.50E-06		1.79E+01
TE-125M			1.04E-28		2.13E-04
TE-127					1.00E-02
TE-127M					1.02E-02
TH-227	4.57E-11	5.42E-21	2.89E-07		2.89E-01
TH-228	9.16E-16		8.08E-03		2.71E+01
TH-229	1.00E-11	1.72E-19	1.14E-05		1.66E+00
TH-230	4.73E-08		1.92E-03		3.06E-02
TH-231	2.81E-05	5.91E-15	5.45E-03		1.06E+00

CH Curies on a Site-by-Site Basis
End of 1993 TRU Inventory (continued)

Nuclide	RFP	SNLA	SRS	MURR	Total Curies
TH-232	3.25E-14		1.03E-02		4.41E-01
TH-234			5.20E-03		6.20E+00
TL-207	4.42E-11	5.17E-21	2.86E-07		2.88E-01
TL-208	3.25E-16		2.90E-03		9.75E+00
TL-209	2.02E-13	2.72E-21	2.45E-07		3.56E-02
TL-210	6.18E-15		1.16E-09		6.62E-04
U-232					2.61E+01
U-233	7.53E-08	5.80E-15	8.85E-03		1.11E+03
U-234	2.85E-03		2.28E+01		9.41E+01
U-235	2.81E-05	5.91E-15	5.45E-03		1.06E+00
U-236	4.89E-04		4.45E-02		5.20E-02
U-237	1.40E+00		1.54E+00		1.07E+01
U-238			5.24E-03	1.00E-10	6.21E+00
U-240			1.34E-11		1.00E-06
Y-90			1.24E-02		2.06E+03
ZN-65					1.21E-08
ZR-93					2.94E-02
ZR-95					7.27E-02
Total	8.55E+04	1.00E-02	5.62E+05	6.87E-02	1.51E+06

APPENDIX F

APPENDIX F
WASTE STREAM IDENTIFICATION CROSS-CORRELATION TABLE

The following tables provide a cross-correlation between the waste stream WIPP ID number, waste stream name, local identifier, TRUCON content code, and NMVP code. The WIPP ID number is used to identify the waste stream profiles. The waste stream name and local identifier are also based on information in the waste stream profiles. The local ID is a site assigned identifier. These may be waste Item Description Codes (IDCs) or other codes which were/are used by the sites in their own waste identification system, or it may be a unique identifier assigned by the site for the purposes of the WTWBIR and/or WIPP data call.

The content codes listed in the TRUCON document were originally provided as a consolidation of the site specific IDCs or codes used under previous waste identification systems. The initial consolidation of the site codes into TRUCON codes was performed in 1988. The majority of these content codes and the correlating IDCs were included in the March, 1990 version of the NMVP. The correlation of the WIPP ID numbers to the TRUCON and NMVP content codes provided in the following tables is based on using the local identifier whenever possible. In many cases, the local identifier or IDC could be traced directly to the IDCs listed in the TRUCON and/or NMVP document. When the IDCs were not provided in the waste stream profile, the correlation was based on matching the waste stream description in the waste stream profile to the descriptions for the content codes in the TRUCON document. A one-to-one correlation between the WIPP ID numbers and the TRUCON and NMVP content codes is not always possible. This is primarily due to one or more of the following reasons:

- The WTWBIR waste stream profiles are typically segregated into mixed and non-mixed waste streams. The TRUCON and NMVP did not provide this segregation.
- Since 1988, when the consolidation of waste streams for the TRUCON was performed, many of the sites have inventoried their wastes into databases, thereby allowing greater segregation and manipulation than that provided in the TRUCON document.
- The WTWBIR provides an inventory of all wastes destined for WIPP. The TRUCON and NMVP only list those waste streams that met the criteria of the TRUPACT-II SARP and the WIPP-WAC.

It is important to note that correlation of an WIPP ID number to a TRUCON or NMVP content code does not imply that the waste stream meets the criteria of the TRUPACT-II SARP or WIPP-WAC. The correlation is provided as guidance only, and is not meant to signify compliance with any of the WIPP criteria or governing regulations.

The first number of a TRUCON content code is a "1" or "2", to provide a distinction between newly generated and retrievably stored waste. For the purposes of the TRUCON, newly generated waste was defined as waste generated after the WIPP waste certification program had been implemented at each site. Retrievably stored waste is waste which was generated before the implementation of the certification program. The WTWBIR does not typically make this distinction, and therefore a WTWBIR waste stream that correlates to a content code listed in TRUCON as 1XX and 2XX, is listed in the correlation tables with both of these codes.

The TRUCON document contains content codes followed by an "A", "B", or "C" letter (i.e., RF 111A, ID 225A). These letters were used for varying reasons. In some cases they were used to distinguish different waste streams within a content code, or to differentiate between different packaging configurations. In other cases they were used to identify waste specifically packaged for the WIPP Test Phase. The letters are only included in the correlation tables if they were used to distinguish between different waste streams. If a letter is not used after the content code in the correlation tables, the waste stream correlates to the "A" content codes.

Correlation tables have been provided for all of the sites except Hanford and the Savannah River Site. There was inadequate information in the TRUCON document and the WTWBIR waste stream profiles to determine a correlation. The waste streams listed in the TRUCON document for these two sites were very general and all-encompassing, whereas the WTWBIR waste streams were more segregated.

ANL-E WASTE STREAM IDENTIFICATION CROSS-CORRELATION TABLE

Waste Stream Name/Description[a]	WIPP ID	RH/ CH	TRUCON[b,c]	NMVP[b,c]
	AE-T001	CH		
	AE-T003	CH		
Aqueous Lab Packs	AE-W038	CH		
Organic Resins	AE-W039	CH		
Wastewater Treatment Sludges	AE-W040	CH	AE 111A	AE 111
Non-activated Lead	AE-W041	CH		
Cadmium containing metal debris	AE-W042	CH		
	RF	RH		

Footnotes:

a - Blank fields indicate that no waste stream name was reported in the waste stream profiles.
b - RH waste streams are not listed in the TRUCON and NMVP.
c - Local identification or Item Description Codes (IDCs) were not reported in the waste stream profiles. Cross-correlation with TRUCON and NMVP content codes were assigned based on matching physical descriptions.

INEL WASTE STREAM IDENTIFICATION CROSS-CORRELATION TABLE

Waste Stream Name/Description	LOCAL ID	RH/CH	WIPP ID	Generator	IDC	TRUCON[c,d]	NMVP[d]
Vitrified Wastes Resulting from Treatment of all Waste		CH	IN-T001				
Electrorefiner Salts - Ba & Cd	CH-ANL-218T	RH	IN-M001	ANL-W			
TRU-Cd Hot Cell Waste	CH-ANL-241T	RH	IN-M002	ANL-W			
Element Hardware FCF Waste	CH-ANL-243T	RH	IN-M003	ANL-W			
Electrorefiner Stripped Cadmium	CH-ANL-245T	RH	IN-M004	ANL-W			
Electrorefiner Insolubles w/Cd & other met	CH-ANL-246T	RH	IN-M005	ANL-W			
Lead Contaminated Waste, Mostly Lead-Lined Gloves	CH-ANL-142T	CH	IN-M006	ANL-W			
Contaminated Lead Debris	ID-EGG-142T	RH	IN-W139				
TRU Heavy Metal Sludge	ID-EGG-291T	RH	IN-W146				
Cemented Sludges/Special Setups	ID-EGG-112T-004	CH	IN-W157	RFP	004	ID 213	ID 213
Concrete/Firebrick	ID-EGG-115T-371	CH	IN-W161	RFP	371	ID 122, 222B	ID 122, 222B
Solidified Inorganic Waste	ID-EGG-112T-114	CH	IN-W166	RFP	114[a]	ID 114	ID 114
Cemented Sludges/Organics	ID-EGG-112T-112	CH	IN-W167	RFP	112[a]	ID 112	ID 112
Combustibles/Dry Paper and Rags	ID-EGG-114T-330	CH	IN-W169	RFP	330	ID 116, 216C	ID 216C
Combustibles/Decon Waste	ID-EGG-114T-120	CH	IN-W170	ANL-E	120	AE 116A,B[b]	AE 116A,B
Combustibles/Research Generated	ID-EGG-114T-110	CH	IN-W171	ANL-E	110	AE 116A,B[b]	AE 116A,B
Combustibles	ID-EGG-114T-010	CH	IN-W172	BETTIS	010		
Cemented Sludges/High Level Acid	ID-EGG-112T-834	CH	IN-W174	MOUND	834		
Cemented Sludges/High Level Caustic	ID-EGG-112T-835	CH	IN-W177	MOUND	835		
Cemented Sludges/High Level Sludge/Cement	ID-EGG-112T-836	CH	IN-W179	MOUND	836	MD 111A[b]	MD 111A
Cemented Sludges/Laundry Sludge	ID-EGG-112T-978	CH	IN-W181	RFP	978	ID 211A	ID 211A
Combustibles	ID-EGG-114T-116	CH	IN-W186	RFP	116[a]	ID 116	ID 116
Cemented Sludges/Bldg. 776 Process Sludge	ID-EGG-112T-976	CH	IN-W188	RFP	976	ID 211A	ID 211A

Waste Stream Name/Description	LOCAL ID	RH/CH	WIPP ID	Generator	IDC	TRUCON[c,d]	NMVP[d]
Benelex and Plexiglass/Pred. Com. Debris	ID-EGG-109T-464	CH	IN-W189	RFP	464	ID 221A	ID 221A
Combustible/Moist Paper and Rags	ID-EGG-114T-336	CH	IN-W197	RFP	336	ID 116, 216A	ID 216A
Combustibles/Plastics, Teflon, Wash & PVC	ID-EGG-114T-337	CH	IN-W198	RFP	337	ID 116, 216C	ID 216C
Combustibles/Wood	ID-EGG-114T-970	CH	IN-W202	RFP	970	ID 216A	ID 216A
Combustible Equipment Boxes, Floor Sweep.	ID-EGG-114T-826	CH	IN-W203	MOUND	826		
Combustible Equipment Drums	ID-EGG-114T-827	CH	IN-W204	MOUND	827	MD 116A[b]	MD 116A
Combustibles/Low Sp. Activity Plastics, Paper	ID-EGG-114T-900	CH	IN-W205	RFP	900	ID 216B	ID 216B
Filters, Glass Filters and Fiberglass	ID-EGG-118T-813	CH	IN-W214	MOUND	813		
Solidified Process Residues	ID-EGG-102T-001	CH	IN-W216	RFP	001	ID 211A	ID 211A
Solidified Process Residues	ID-EGG-102T-111	CH	IN-W220	ANL-E, RFP	111	ID 111, AE 116A,B[b]	ID 111, AE 116A,B
Absorbed Aqueous Liquids	ID-EGG-102T-113	CH	IN-W221	RFP	113[a]	ID 113	ID 113
Solidified Process Residues	ID-EGG-102T-292	CH	IN-W222	RFP	292		ID NYD
Benelex and Plexiglass/Pred. Com. Debris	ID-EGG-109T-302	CH	IN-W225	RFP	302	ID 121, 221A	ID 221A
Wastewater Treatment Sludges	ID-EGG-102T-002	CH	IN-W228	RFP	002	ID 211A	ID 211A
Concrete-Brick/Inorganic Solid Waste	ID-EGG-115T-122	CH	IN-W230	RFP	122[a]	ID 122	ID 122
Glass Waste Debris	ID-EGG-119T-118	CH	IN-W240	RFP	118[a]	ID 118	ID 118
Glass	ID-EGG-119T-440	CH	IN-W243	RFP	440	ID 118, 218B	ID 218B
Unleached Rashig Rings	ID-EGG-119T-441	CH	IN-W245	RFP	441	ID 125, 225B	ID 225B
Leached Rashig Rings	ID-EGG-119T-442	CH	IN-W247	RFP	442	ID 118, 218A	ID 218A
Glass, Flasks, Sample Vials	ID-EGG-119T-810	CH	IN-W249	MOUND	810		
Leaded Rubber-Glovebox Gloves	ID-EEG-120T-123	CH	IN-W250	RFP	123[a]	ID 123	ID 123
Leaded Rubber Gloves and Aprons	ID-EGG-120T-339	CH	IN-W252	RFP	339	ID 123, 223A	ID 223A
Leaded Rubber Gloves and Aprons	ID-EGG-120T-463	CH	IN-W254	RFP	463	ID 223A	ID 223A
Dry Box Gloves and O-Ring	ID-EGG-120T-802	CH	IN-W256	MOUND	802		
Alpha Hot Cell Waste	ID-EGG-144T-104	CH	IN-W259	ANL-E	104		

Waste Stream Name/Description	LOCAL ID	RH/CH	WIPP ID	Generator	IDC	TRUCON[c,d]	NMVP[d]
Radioactive Sources: Solid Binary Scrap Powder	ID-EGG-144T-040	RH/CH	IN-W260	BETTIS	040		
Particulate Waste - Contaminated Soil	ID-EGG-141T-842	CH	IN-W263	MOUND	842	MD 111B[b]	MD 111B
Particulate Waste - Blacktop, Concreter, Dirt & Sand	ID-EGG-141T-374	CH	IN-W265	RFP	374	ID 121	ID 121
Particulate Wastes - Laboratory Waste	ID-EGG-141T-150	CH	IN-W269	INEL	150		
Graphite Molds & Graphites, Contam. Hg	ID-EGG-137T-814	CH	IN-W271	MOUND	814		
Debris Waste - Coarse Graphite Molds	ID-EGG-137T-312	CH	IN-W272	RFP	312	ID 115	ID 115
Debris Waste-Graphite Molds, Crucbl, Core	ID-EGG-137T-301	CH	IN-W275	RFP	301		
Debris Waste - Graphite Molds & Crucibles	ID-EGG-137T-300	CH	IN-W276	RFP	300	ID 115, 215A	ID 215A
Metal Debris - Metal, Equip., pipes, valves	ID-EGG-132T-803	CH	IN-W280	MOUND	803		
Het. Debris-Noncombustible Equip. Boxes	ID-EGG-134T-824	CH	IN-W281	MOUND	824	MD 117A[b]	MD 117A
Het. Debris-Americium Process Residue	ID-EGG-134T-241	CH	IN-W283	RFP	241	ID 125, 225A	ID 225A
Heterogeneous Debris	ID-EGG-134T-201	CH	IN-W285	BATTELLE	201		
Metal Debris-Misc., Cut-up Glovebox	ID-EGG-134T-101	CH	IN-W287	ANL-E	101		
Miscellaneous Solids	ID-EGG-134T-121	CH	IN-W289	ANL-E	121	AE-116A[b]	AE-116A
Debris Waste - Miscellaneous	ID-EGG-134T-100	CH	IN-W291	ANL-E	100		
Metal Debris - Leached Non Special Source	ID-EGG-132T-481	CH	IN-W294	RFP	481	ID 217C	ID 217C
Metal Debris- Non Special Source	ID-EGG-132T-480	CH	IN-W296	RFP	480	ID 117, 217C	ID 217C
Metal Debris - Tantalum	ID-EGG-132T-320	CH	IN-W298	RFP	320	ID 117, 217B	ID 217B
Metal Debris Waste	ID-EGG-132T-117	CH	IN-W300	RFP	117[a]	ID 117	ID 117
Unknown Solids, Noncompressible	ID-EGG-132T-020	CH	IN-W302	BETTIS	020		
Equipment	ID-EGG-134TN-825	CH	IN-W304	MOUND	825		
Plastic, Manipulator Boots, etc.	ID-EGG-114TN-804	CH	IN-W305	MOUND	804		
Uncategorized - Pre 73 Drums	ID-EGG-287T-9999	CH	IN-W306.1	RFP			
Uncategorized - Pre 73 Drums	ID-EGG-287T-9999	CH	IN-W306.2	RFP			
Uncategorized - Pre 73 Drums	ID-EGG-287T-9999	CH	IN-W306.3	RFP			

Waste Stream Name/Description	LOCAL ID	RH/CH	WIPP ID	Generator	IDC	TRUCON[c,d]	NMVP[d]
Uncategorized - Pre 73 Drums	ID-EGG-287T-9999	CH	IN-W306.4	RFP			
Unknown Solids	ID-EGG-287T-000	CH	IN-W308	INEL/RFP	000		
Organic Setups	ID-EGG-158T-003	CH	IN-W309	RFP	003	ID 212	ID 212A
Salts: Molten Salts - 30% Unpulverized	ID-EGG-146T-409	CH	IN-W311	RFP	409		
Salts: Pyrochemical Salt Waste	ID-EGG-146T-124	CH	IN-W312	RFP	124[a]	ID 124	ID 124
Salts: Direct Oxide Reduction Salt	ID-EGG-146T-414	CH	IN-W314	RFP	414		
Resins: Leached and Cemented Resins	ID-EGG-145T-432	CH	IN-W317	RFP	432	ID 226A	ID 226A
Actinide Neutron Sources, Exp'tal Fuel Capsules	ID-EGG-144TN-154	RH	IN-W322	INEL	154		
Combustible Lab Waste	ID-EGG-144T-153	RH	IN-W323	INEL	153		
Unk. Classified Parts	ID-EGG-288T-815	CH	IN-W325	MOUND	815		
Unk. Low Specific Activity Waste <100nCi/g Comb	ID-EGG-288T-847	CH	IN-W327	MOUND	847		
Unk. Low Specific Activity Waste <100nCi/g Comb	ID-EGG-288T-848	CH	IN-W329	MOUND	848		
Unk. Plastic, Tygon, Manipulator Boots	ID-EGG-288T-801	CH	IN-W330	MOUND	801		
Unk. Solidified Solutions	ID-EGG-288T-204	CH	IN-W332	BATTELLE	204		
Unk. Debris Paper, Metal, Glass	ID-EGG-288T-203	CH	IN-W334	BATTELLE	203		
Unk. Combustible Solids/Debris	ID-EGG-288T-202	CH	IN-W336	BATTELLE	202		
Unk. Americium Solids	ID-EGG-288T-200	RH	IN-W337	INEL	200		
Unk. ANL-W Anal. Chem. Lab. Misc. Liquids	ID-EGG-288T-163	CH	IN-W338	ANL-W	163		
Unk. ANL-W Anal. Chem. Lab. Misc. Solids	ID-EGG-288T-162	CH	IN-W339	INEL/ANL-w	162		
Unk. ANL-WHFEF Analytical Chem. & Met. Combust.	ID-EGG-288T-160	CH	IN-W341	INEL	160		
Unknown Miscellaneous Sources	ID-EGG-288T-157	CH	IN-W342	INEL	157		
Unknown TRU Scrap	ID-EGG-288T-155	CH	IN-W345	INEL	155		
Unknown Absorbed Liquids	ID-EGG-288T-102	CH	IN-W347	ANL-E	102		
Unknown RH-TRU Waste	ID-EGG-288T-107	RH	IN-W349	ANL-E	107		

Waste Stream Name/Description	LOCAL ID	RH/CH	WIPP ID	Generator	IDC	TRUCON[c,d]	NMVP[d]
Unknown Special Source Material	ID-EGG-288T-106	CH	IN-W350	ANL-E	106		
Unknown Empty Bottles	ID-EGG-288T-105	CH	IN-W351	ANL-E	105		
Solidified Solutions	ID-EGG-158TN-050	CH	IN-W353	BETTIS	050		
Salts: Gibson Salts	ID-EGG-146TN-412	CH	IN-W354	RFP	412	ID 224A	ID 224A
Salts; Electrorefining Salts	ID-EGG-146TN-411	CH	IN-W355	RFP	411	ID 124, 224A	ID 124, 224A
Salts: Molten Salts - 30% Pulverized	ID-EGG-146TN-410	CH	IN-W356	RFP	410	ID 224A	ID 224A
Radioactive Sources: Pu Neutron Sources	ID-EGG-144TN-152	RH	IN-W358	INEL	152		
Radioactive Sources: Neutron Sources	ID-EGG-144TN-015	RH	IN-W359		015		
Radioactive Sources: Misc. Sources	ID-EGG-144TN-012	RH	IN-W360	BETTIS	012		
Non-metal Molds-LECO Crucible	ID-EGG-137TN-370	CH	IN-W366	RFP	370	ID 118, 222A	ID 118, 222A
Graphite Scarfed Chunks - Molds & Crucibles	ID-EGG-137TN-303	CH	IN-W369	RFP	303	ID 115	ID 115
Graphite Molds & Crucibles	ID-EGG-137TN-115	CH	IN-W370	RFP	115[a]	ID 115	ID 115
Metal Debris - Zinc, Mg Alloy Metal	ID-EGG-132TN-416	CH	IN-W371	RFP	416	ID 217A	ID 217A
Metals-Unknown, Met Samples Fissile	ID-EGG-132TN-081	RH	IN-W372	BETTIS	801		
Concrete/Brick, Asphalt	ID-EGG-115TN-960	CH	IN-W374	RFP	960		

FOOTNOTES

a. After 1985 RFP shipped waste to INEL used content code numbers similar to those presented in the TRUCON document instead of the IDCs used before and following this time. For example, content code 118 (ID-EGG-119T-118) consists of IDCs 370, 440, and 442.

b. These are TRUCON-equivalent codes. These codes are presently approved transport in the TRUPACT-II package from their respective generators to WIPP (i.e., MD-111 can be shipped from Mound to WIPP). A revision to TRUCON will be prepared to allow transport of these codes from INEL to WIPP.

c. The "A" and "B" trailers on some of the content codes are used in TRUCON to identify wastes within a content code that differ in one or more parameter(s), such as waste packaging, or segregation of one or more IDCs. The ID 1XX codes do not include the letter code, as all of these are assumed to be the ID 1XXA codes.

d. A blank entry under TRUCON and/or NMVP denotes that the corresponding wastes were not included in these documents and do not have a correlating content code. Revision 6, TRUCON and the 3/9/90 issue of the NMVP were used to determine the correlation.

LANL WASTE STREAM IDENTIFICATION CROSS-CORRELATION TABLE

Waste Stream Name/Description[a]	LOCAL ID	WIPP ID	RH-CH	IDC[b]	TRUCON[b,c]	NMVP[b,c]
Mixed Metal Scrap & Incidental Combustibles	LA-T001	LA-T001	CH	001	LA 125A	LA 125A
Combustible Waste	LA-T004	LA-T004	CH	004	LA 116A	LA 116A
Non-combustible scrap	LA-T005	LA-T005	CH	005 LM 005 LG	LA 117A LA 118A	LA 117A LA 118A
Cemented Process Residues, *Solidified Inorganic Process Solids*	LA-T006	LA-T006	CH	006	LA 114A	LA 114A
Non-combustible hot-cell waste	LA-T007	LA-T007	CH			
Contaminated Soil	LA-T008	LA-T008	CH			
Glovebox and equipment metal in boxes	LA-T009	LA-T009	CH			
Combustible Waste, including rubber	LA-TR04	LA-TR04	RH			
Non-combustible scrap	LA-TR05 LA-T015	LA-TR05	RH RH			
Non-combustible hot-cell waste	LA-TR07 LA-T017	LA-TR07	RH RH			
Mixed Metal Scrap and Incidental Combustibles	LA-WR01 LA-W011	LA-WR01 LA-W011	RH RH			
Non-combustible Scrap	LA-WR05 LA-W015	LA-WR05	RH RH			
Mixed Metal Scrap and Incidental Combustibles	LA-W001	LA-W001	CH	001	LA 125A	LA 125A
Solidified Aqueous Waste, Cemented Sludge, *Concreted Aqueous Waste*	LA-W002	LA-W002	CH	002	LA 111A LA 211 A	LA 111A LA 211A
Solidified Inorganics, Dewatered Sludge	LA-W003	LA-W003	CH	003	LA 111B LA 211B	LA 111B LA 211B

Waste Stream Name/Description[a]	LOCAL ID	WIPP ID	RH-CH	IDC[b]	TRUCON[b,c]	NMVP[b,c]
Combustible Waste, including rubber	LA-W004	LA-W004	CH	004	LA 116A	LA 116A
Non-combustible Scrap	LA-W005	LA-005	CH	005 LM 006 LG	LA 117A LA 118A	LA 117A LA 118A
Cemented Process Residues, *Solidified Inorganic Process Solids*	LA-W006	LA-W006	CH	006	LA 114A	LA 114A
Glovebox & Equipmental Metal Waste	LA-W009	LA-W009	CH			

Footnotes:

a - The waste stream description name is from the WTWBIR waste stream profiles. The names in italic represent the name of the stream in the TRUCON and/or NMVP if different than the WTWBIR name.

b – The correlation of the WIPP# to IDCs, TRUCON codes, and NMVP identifiers has been deduced from waste stream names and material parameter information. There is not a one-to-one correlation between these codes, and the waste stream by WIPP# may include one or more waste streams as identified in the TRUCON and/or NMVP. The TRUCON and NMVP correlations codes listed may not be inclusive of all TRUCON and NMVP codes in that WIPP#, however, those listed are the only codes that could be determined from the available information.

c – There is no TRUCON or NMVP correlation for the RH wastes.

LLNL WASTE STREAM IDENTIFICATION CROSS-CORRELATION TABLE

Waste Stream Name/Description[a]	LOCAL ID	WIPP ID	RH/CH	TRUCON[b]	NMVP[b]
R&D Glovebox Waste (Form 1)	Form 1 Mixed	LL-M001	CH	LL 116	LL 116
Solidified Waste (Form 2)	Form 2 Non-mixed	LL-T001	CH	LL 111[c]	LL 111[c]
R&D Glovebox Waste (Form 1)	Form 1 Non-Mixed	LL-T002	CH	LL 116	LL 116
Combined metal scrap & incidental combustible (Form 3)	Form 3 Non-Mixed	LL-T003	CH	LL 125	LL 125
Pyrochemical Salt Waste (Form 4)	Form 4 Non-Mixed	LL-T004	CH	LL 124	LL 124
HEPA Filters (Form 5)	Form 5 Non-Mixed	LL-T005	CH		
Combined metal scrap & incidental combustible (Form 3)	Form 3 Mixed	LL-W018	CH	LL 125	LL 125
Solidified Waste (Form 2)	Form 2 Mixed	LL-W019	CH	LL 111[c]	LL 111[c]

Footnotes:

a - Blank fields indicate that no waste stream name was reported in the waste stream profiles.
b - Item Description Codes (IDCs) as defined in the TRUCON were not reported in the waste stream profiles. Cross-correlation with TRUCON and NMVP content codes were assigned based on matching physical descriptions provided. The content codes listed do not represent a one-to-one correlation with the WIPP waste streams. Blank fields indicate that no correlating content code could be assigned.
c - The content code listed is only a subset of the WIPP waste stream. Correlating content codes are not listed in TRUCON or the NMVP for the remainder of the WIPP waste stream.

MOUND WASTE STREAM IDENTIFICATION CROSS-CORRELATION TABLE

Waste Stream Name/Description	LOCAL ID	WIPP ID	RH/ CH	TRUCON[a]	NMVP[a]
Asbestos Debris	MD-805	MD-M001	CH		
Inorganic Process Residues	MD-836	MD-T001	CH	MD 111A	MD 111A
Plastic/Rubber Debris	MD-827	MD-T002	CH	MD 116A	MD 116A
Contaminated Soil	MD-842	MD-T003	CH	MD 111B	MD 111B
Uncategorized Unknowns	MD-826	MD-T004	CH		
Contaminated soils w/ debris	MD-842	MD-T005	CH	MD 111B	MD 111B
Metal debris w/o lead or cadmium	MD-824	MD-T006	CH	MD 117A	MD 117A
Uncategorized metal debris	MD-825	MD-T007	CH		
Uncategorized Plastic and Rubber Debris	MD-804	MD-T008	CH		
Uncategorized Combustible Debris	MD-801+804	MD-T009	CH		
Uncategorized Composite Filters	MD-825	MD-T010	CH		
Predominantly Metal Debris	MD-824	MD-T011	CH	MD 117A	MD 117A
Uncategorized Heterogenous Debris	MD-825	MD-T012	CH		
Leaded gloves/aprons		MD-T013	CH		
Absorbed Aqueous Liquids	MD-833	MD-W002	CH		

Footnotes:

a - Correlating TRUCON and NMVP content codes were assigned by matching the Local ID (Column 2) to the Item Description Codes (IDCs) listed in the TRUCON and NMVP documents. Blank fields indicate that no correlating content code exists.

NTS WASTE STREAM IDENTIFICATION CROSS-CORRELATION TABLE

Waste Stream Name/Description	LOCAL ID	WIPP ID	TRUCON[a]	NMVP[a]
Heterogenous Debris, Uncategorized	LL-002	NT-W001	NT 111 NT 116 NT 211 NT 225	NT 111 NT 116 NT 211 NT 225

Footnotes:

a - This waste stream has been correlated to the TRUCON and NMVP content codes based on physical description in the waste stream profile. WIPP stream # NT-W001 includes all of the content codes listed, and may contain other waste streams not listed in TRUCON or the NMVP.

ORNL WASTE STREAM IDENTIFICATION CROSS-CORRELATION TABLE

Waste Stream Name/Description	LOCAL ID	WIPP ID	RH/CH	TRUCON[a,b]	NMVP[a,b]
RH TRU Heterogenous Debris	2039	OR-W040	RH		
Inactive Storage Tank contents - MTRU Sludge	2041	OR-W042	CH		
CH TRU Heterogenous Debris	2043	OR-W044	CH	OR 125A OR 125B	OR 125A OR 125B
CH TRU Uncategorized	2044	OR-W045	CH		
Liquid Low Level Waste Storage Tanks - Sludge	2045	OR-W046	RH		
CH TRU Heterogenous Debris (w/liquids)	2046	OR-W047	CH		

Footnotes:

a - RH waste streams are not listed in the TRUCON and NMVP.

b - Item Description Codes (IDCs) were not reported in the waste stream profiles. Cross-correlation with TRUCON and NMVP content codes were assigned based on matching physical descriptions. This is not a one-to-one correlation between TRUCON or NMVP content codes and WIPP numbers.

RFP WASTE STREAM IDENTIFICATION CROSS-CORRELATION TABLE

Waste Stream Name/Description[a]	LOCAL ID	WIPP ID	IDC[b]	TRUCON[b]	NMVP[b]
Cemented Sludge/*Solidified Inorganic Sludge*	823	RF-T001	823[d]		
Solidified Process Solids/TRM	RF-806	RF-M001	806	RF 114	RF 114
Supercompacted Combustibles/TRM	RF-2116	RF-M002	2116[e]	RF 116C	
Combustible Debris	821, 822, 825	RF-T002	330, 336, 337, 821, 822[d], 825		
Ground Glass	444	RF-T003	444	RF 118	RF 118
Misc. Pu Recovery By-Product/TRU/*Salts*	411,412,414,409	RF-T004	409[d], 411, 412[d], 414[d]	RF 124	RF 124
Particulate Sludge/TRU/*Solidified Inorganic Waste/ Final waste form is RF-T06*	292,299,372	RF-T005	292, 299, 372		
Solidified Process Solids/TRU/*Final form for Particulate Sludges after Treatment*	806	RF-T006	806	RF 114	RF 114
Supercompacted Combustibles/TRU	2216	RF-T007	2216		
Soil & Cleanup Debris/TRM/*Blacktop, concrete, dirt, etc.*	RF-374	RF-W008	374	RF 121	RF 121
Aqueous Sludge/*Solidified Process Residues*	800, 803, 807	RF-T010	800, 803, 807	RF 111	RF 111
Aqueous Sludge/TRM	RF-800,803,807	RF-W010	800, 803, 807	RF 111	RF 111
Metal Debris	480	RF-T011	480, 484, 485, 486, 489, 481[d]	RF 117	RF 117
Metal/TRM	RF-480	RF-W011	480, 481	RF 117	RF 117
Combustibles/TRM	RF-831,832,833	RF-W012	330, 336, 337, 831, 832, 833	RF 116	RF 116
Solidified Organics/TRM	RF-801	RF-W013	801	RF 112	RF 112
Used Absorbents/TRM/*Absorbed Organic Liquids*	RF-375	RF-W026	375	RF 122	RF 122
Lead/TRM	RF-321	RF-W028	321	RF 117	RF 117
Leaded Gloves/Apron TRM	RF-339	RF-W029	339	RF 123	RF 123
Ground Glass/TRM	RF-444	RF-W032	444	RF 118	RF 118

Waste Stream Name/Description[a]	LOCAL ID	WIPP ID	IDC[b]	TRUCON[b]	NMVP[b]
Firebrick, Pulverized or Fines/TRU	377	RF-T036	377, 378	RF 122	RF 122
Firebrick, Pulverized or Fines/TRM	RF-377	RF-W036	377, 378	RF 122	RF 122
Heavy Metal (non-SS)/TRU	RF-320	RF-W037	320	RF 117	RF 117
Heavy Metal (non-SS)	320	RF-T037	320	RF 117	RF 117
Solidified Lab Waste	802	RF-T038	802	RF 113	RF 113
Solidified Lab Waste/TRM	RF-802	RF-W038	802	RF 113	RF 113
Incinerator Ash/TRM *(Final form is solidified process solids)*	Not Reported	RF-W040	419,420, 421, 425, 428		
Leaded Gloves-Acid Contaminated/TRM	RF-341	RF-W041	341		
Glass/TRM	440,442,442,856	RF-W052	440, 441, 442, 856[a]	RF 118	RF 118
Glass Debris	440,441,442,856	RF-T052	440, 441, 442, 856[a]	RF 118	RF 118
Mg Oxide Crucibles/TRU/*Ceramic/Brick Debris*	368,370	RF-T056	368, 370, 655	RF 118	RF 118
Mg Oxide Crucibles/TRM/*Ceramic/Brick Debris*	RF-370,368,655	RF-W056	370, 368, 655	RF 118	RF 118
Insulation/TRM	RF-438	RF-W057	438	RF 122	RF 122
Insulation/Same as RF-W057		RF-W057	438	RF 122	RF 122
Insulation/TRU	438	RF-T057	438		
Misc. Pu Recovery Byproducts/TRM/*Salt Waste*	RF-411	RF-W058	365, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 418, 427, 429, 433, 434, 435, 473, 654	RF 124	RF 124
Sand, Slag & Crucibles/TRM	392,398	RF-T059	392, 398		
Sand, Slag, and Crucible/TRM/*Final waste from is solidified process solids (RF-M01).*	391	RF-W059	387, 390, 395, 396, 391, 392, 393, 394, 399		
Coarse Graphite/TRM	RF-303,312	RF-W060	303, 312	RF 115	RF 115
Coarse Debris	303,312	RF-T060	303, 312	RF 115	RF 115
Miscellaneous Liquids/TRM	070,400,401	RF-W063	070, 400, 401, 500, 503, 508, 527, 541		

Waste Stream Name/Description[a]	LOCAL ID	WIPP ID	IDC[b]	TRUCON$_b$	NMVP$_b$
Miscellaneous Liquids/TRU	070,400,401,501	RF-T063			
Calcium metal/TRM	RF-333	RF-W065	**333**		
Filters and Media/TRU	335,342,490,491	RF-T068	**335, 342, 490, 491**, 321, 331, 376, 492	RF 119	RF 119
Filters & Media/TRM	RF-490	RF-W066	328, 331, **335, 342**, 376, **490, 491**, 492	RF 119	RF 119
Cemented Filters/TRU	376	RF-T067	**376**, 338	RF 119	RF 119
Cemented Filters/TRM	RF-376	RF-W067	**376**, 338	RF 119	RF 119
Particulate Sludge/TRM/*Final waste form is solidified process solids (RF-M01).*	292	RF-W068	292, 299, 372, 823		
Organic Resins/TRM	430,431,809	RF-W069	430, 431, **809**	RF 126	RF 126
Organic Resins	809	RF-T069	430, 431, **809**	RF 126	RF 126
Process Residues/TRM	289,292,299	RF-W076	289, 292, 299, 340, 372, 422, 423		
Solidified Inorganic Waste	044,080,092	RF-T076	044,080,192		

Footnotes:

a - *Italic Text* denotes waste stream descriptions obtained from the waste stream profile used to clarify the type of waste being described.
b - **Bold Text** denotes IDCs that are noted as Final Waste Form #'s by the RFP.
c - Correlating TRUCON and NMVP content codes are assigned based on the final waste form numbers (bolded IDCs). Blank fields indicate that no correlating content code exists for the waste stream.
d - These IDCs are listed as INEL TRUCON codes (generated by RFP), but are not included as RFP TRUCON content codes. Therefore, no correlation exists.
e – Supercompacted combustibles are listed in TRUCON under RF 116C, but under older IDCs 831, 832, 833.

APPENDIX G

APPENDIX G
MWIR CODE DESIGNATIONS AND DESCRIPTIONS

Code	Description	Code	Description
D001A	High TOC Ignitable Liquids	F001-F005	Pharmaceutical Industry Wastewaters
D001B	Descr. Based on 40 CFR 261.21, High TOC Subcat., Managed CWA	F005A	Spent Nonhalogenated Solvents
D001C	Descr. Based on 40 CFR 261.21, High TOC Subcat., Non-CWA	F005B	Listed for 2-Nitropropane
D002A	Acid, Alkaline, & Other Subcat Based on 40 CFR 261.22 CWA	F005C	Listed for 2-Ethoxyethanol
D002B	Acid, Alkaline, & Other Subcat Based on 40 CFR 261.22 Non-CWA	F025A	Light Ends
D002C	High Level Wastes	F025B	Spent Filters/Aids and Desiccants
D003A	Reactive Cyanides	K006A	Anhydrous
D003B	Reactive Sulfides	K006B	Hydrated
D003C	Explosives	K061A	High Zinc
D003D	Water Reactives	K061B	Low Zinc
D003E	Other Reactives	K069A	Calcium Sulfate
D004A	TCLP Toxic for Arsenic	K069B	Non Calcium Sulfate
D004B	High Level Wastes	K071A	Low Mercury
D005A	TCLP Toxic for Barium	K071B	High Mercury
D005B	High Level Wastes	K106A	Low Mercury
D006A	TCLP Toxic for Cadmium	K106B	High Mercury
D006B	Cadmium-containing Batteries	K106C	High Mercury Residues from RMERC
D006C	High Level Wastes	K106D	Low Mercury Residues from RMERC
D007A	TCLP Toxic for Chromium	K106E	Low Mercury Residues
D007B	High Level Wastes	K106F	Wastewaters
D008A	TCLP Toxic for Lead	P065A	High Mercury Incinerator or RMERC Residues Containing Mercury
D008B	Lead Acid Batteries	P065B	Residues That Are Not Incinerator or RMERC Residues

001187

APPENDIX G
MWIR CODE DESIGNATIONS AND DESCRIPTIONS (continued)

Code	Description	Code	Description
D008C	Radioactive Lead Solids	P065C	Low Mercury RMERC Residues Containing Mercury Fulminate
D008D	High Level Wastes	P065D	Incinerator Residues Containing Mercury Fulminate
D009A	TCLP Toxic for Mercury	P065E	Wastewaters
D009B	High Mercury (Contains Organics)	P092A	High Mercury Incinerator or RMERC Residues Containing Phenyl Mercury Acetate
D009C	High Mercury (Contains Inorganics)	P092B	Residues That Are Not Incinerator or RMERC Residues
D009D	Elemental Mercury Contaminated with Radioactive Materials	P092C	Low Mercury RMERC Residues Containing Phenyl Mercury Acetate
D009E	Hydraulic Oil Contaminated with Mercury Radioactive Material	P092D	Incinerator Residues Containing Phenyl Mercury Acetate
D009F	High Level Wastes	P092E	Wastewaters
D010A	TCLP Toxic for Selenium	U151A	High Mercury Residues from RMERC
D010B	High Level Wastes	U151B	Low Mercury Residues from RMERC
D011A	TCLP Toxic for Silver	U151C	Low Mercury Residues
D011B	High Level Wastes	U151D	Radioactive Elemental Mercury

001188

APPENDIX H

APPENDIX H

Isotopic Mixes for INEL

Pu-52 Isotopic Mix for INEL		PU-83 Isotopic Mix for INEL	
Radionculide	Mass Fraction	Radionculide	Mass Fraction
^{238}Pu	1.2 E-04	^{236}Pu	10^{-06}
^{239}Pu	9.3826 E-01	^{238}Pu	8.35 E-01
^{240}Pu	5.82 E-02	^{239}Pu	1.4 E-01
^{241}Pu	3.4 E-04	^{240}Pu	2.0 E-02
^{241}Pu	2.4 E-04	^{241}Pu	4.0 E-03
^{241}Am impurity	200 µg/g W G Pu	^{242}Pu	1.0 E-03

LOS ALAMOS NATIONAL LABORATORY WASTE MATERIAL TYPE CODES

The Los Alamos National laboratory (LANL) uses a set of codes to specify special mixtures of special materials in waste matrices where appropriate. In the listing that follows, the codes appear on the left and the column on the right contains the specifics of the mixture. subheadings provide additional general information where thought to be helpful to the reader.

Isotopic Mixes for LANL

Type Code	Type Description
	Uranium - depleted in U235
U10	Total
U11	<0.21% U235
U12	0.21 to 0.24% U235
U13	>0.24 to <0.26% U235
U14	0.26 to <0.28% U235
U15	0.28 to <0.31% U235
U16	0.31 to <0.50% U235
U17	0.50 to <0.60% U235
U18	0.60 to <0.711% U235
	Uranium - enriched in U235
U20	Total
U21	>0.711 to <0.90% U235
U22	0.90 to <1.15% U235
U23	1.15 to <1.60% U235

Type Code	Type Description
U24	1.60 to <2.00% U235
U25	2.00 to <2.60% U235
U26	2.60 to <2.90% U235
U27	2.90 to <3.10% U235
U28	3.10 to <3.40% U235
U29	3.40 to <3.90% U235
U30	3.90 to <4.10% U235
U31	4.10 to <5.00% U235
U32	5.00 to <10.0% U235
U33	10.0 to <20.0% U235
U34	20.0 to <35.0% U235
U35	35.0 to <45.0% U235
U36	45.0 to <80.0% U235
U37	80.0 to <92.0% U235
U38	92.0 to <94.0% U235
U39	94.0% and above U235
Plutonium - 242	
Pu40	Total
Pu41	20 to 60%
Pu42	> 60%
Pu43	Americium 241
Pu44	Americium 243
Pu45	Curium 246
Pu46	Berkelium 249
Pu48	Californium 252
Plutonium - 239	
Pu50	Total
Pu51	<4.00% Pu240
Pu52	4.00 to <7.00% Pu240
Pu53	7.00 to <10.0% Pu240

Type Code	Type Description
Pu54	10.0 to <13.0% Pu240
Pu55	13.0 to <16.0% Pu240
Pu56	20.0 to <20.0% Pu240
Pu57	20.0% and above Pu240
Uranium - enriched in U233	
U70	Total
U71	< 5 ppm U232
U72	5 to <50 ppm U232
U73	50 ppm and above U232
U81	Normal Uranium - Total (0.711% U235)
U82	Nuptunium 237 - Total
U83	Plutonium 238 - Total
U88	Thorium - Total

APPENDIX I

OAK RIDGE NATIONAL LABORATORY
MANAGED BY MARTIN MARIETTA ENERGY SYSTEMS, INC.
FOR THE U.S. DEPARTMENT OF ENERGY

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December 22, 1994

Distribution

Final Review (Sign-Off) of Transuranic Waste Section (Chapter 3) of the Integrated Data Base Report (DOE/RW-0006, Rev. 10)

Attached is the final update of this section based on DOE site information received. Please convey to either Royes Salmon or me any final comments you may have on this section no later than Friday, December 30, 1994. Royes' phone number is 615/574-6607. Your cooperation and assistance are appreciated.

Steve Storch

Stephen N. Storch
Integrated Data Base Program

SNS:db

Attachment

Distribution:

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3. TRANSURANIC WASTE

3.1 INTRODUCTION

This chapter presents information on the inventories and characteristics of transuranic waste (TRUW) at various sites in the United States. TRUW is a waste category peculiar to DOE; it does not apply to wastes regulated by the NRC. DOE Order 5820.2A defines TRUW as waste that (1) is contaminated with alpha-emitting transuranium (i.e., atomic numbers greater than 92) radionuclides with half-lives greater than 20 years and (2) contains a total concentration of such radionuclides in excess of 100 nCi per gram of waste at the time of assay.[1]

Under an earlier definition, DOE wastes containing more than 10 nCi of TRU radionuclides per gram of waste were classified as TRUW. The change to 100 nCi of TRU radionuclides per gram of waste took place in 1984. As a result of this change, some waste that had already been classified as TRUW became potentially reclassifiable as low-level waste (LLW). Some of this waste has been so reclassified, and some is still managed as TRUW with the potential of being reclassified as LLW at some future time.

DOE Order 5820.2A also states that heads of field elements can determine that other alpha-contaminated waste peculiar to a specific site must be managed as TRUW.[1] As a consequence of this provision, wastes containing radionuclides such as ^{233}U, ^{241}Pu, and ^{244}Cm, which do not meet the strict definition of TRU radionuclides because of atomic number or half-life, may be classified as TRUW at some sites.

TRUW is primarily generated by research and development activities, plutonium recovery, weapons manufacturing, environmental restoration, and decontamination and decommissioning (D&D) projects. Most TRUW exists in solid form (e.g., items such as protective clothing, paper trash, rags, glass, miscellaneous tools, and equipment that have become contaminated with TRU radionuclides). Some TRUWs are in liquid form (sludges) resulting from chemical processing for recovery of plutonium or other TRU elements. Prior to 1970, TRUW was disposed of on-site in shallow, landfill-type configurations. TRUW disposed of in this manner is referred to as "buried" TRUW. In 1970, the U.S. Atomic Energy Commission (AEC), which was a predecessor to DOE, concluded that waste containing long-lived alpha-emitting radionuclides should have greater confinement from the environment. Thus, all TRUW generated since the early 1970s has been segregated from other waste types and placed in retrievable storage pending shipment and final disposal in a permanent geologic repository.[2] This waste is referred to as "retrievably stored" TRUW.

Retrievably stored waste is contained in a variety of packagings (metal drums, wooden and metal boxes) and is stored in earth-mounded berms, concrete culverts, or other types of facilities.

TRUW packages are classified as either "contact handled" (CH) or "remote handled" (RH) depending on the radiation level at the surface of the package at the time of packaging. If this level exceeds 200 mrem/h, the package is classified as RH.

CH TRUW contains relatively small quantities of fission and activation products that produce highly penetrating radiation; typically, its emissions consist mostly of alpha particles and low-energy photons of little penetrating power. Most TRUW (more than 90% by volume) is of the CH type. RH TRUW typically contains a greater proportion of fission and activation products that produce highly penetrating radiation and therefore tends to produce a higher level of radiation at the surface of the package.

It is estimated that as much as 50 to 60% of TRUW is mixed waste, meaning that it contains, in addition to radioactive constituents, hazardous constituents defined and regulated in accordance with the Resource Conservation and Recovery Act (RCRA). Examples of mixed waste are radionuclide-contaminated spent solvents, discarded materials contaminated with both solvents and radioactive materials, scintillation fluids, and discarded contaminated lead shielding. Mixed TRUW must be managed to comply with the applicable hazardous waste regulations (e.g., RCRA) as well as those applying to radioactive TRUW only. Some TRUW may be contaminated with hazardous materials defined by other regulations. DOE is currently developing strategies for identifying and managing TRUW containing hazardous contaminants defined by regulations other than RCRA.

Under existing arrangements, retrievably stored TRUW is the responsibility of the DOE/EM Office of Waste Management (EM-30). It is planned that the retrievably stored TRUW and newly generated TRUW from defense-related activities will be shipped to the Waste Isolation Pilot Plant (WIPP) for disposal. Prior to the start of these shipments, it is planned that tests will be conducted over approximately the next 4 years to ensure that the wastes to be shipped to WIPP, and the criteria for their emplacement at WIPP, will meet all applicable federal and state requirements for TRUW and mixed TRUW. If the test phase is successful, the retrievable TRUW inventory will be disposed of in WIPP over approximately the next 20 years.

Buried TRUW and TRUW generated from site remediation activities and D&D activities are the responsibility of the Office of Environmental Restoration (EM-40). The disposition of TRUW in these categories is uncertain at this time.

3.2 TRUW INVENTORIES

3.2.1 Sources of Data

Quantitative information contained in this chapter is derived from data furnished by the DOE sites through annual data calls, as described later in this section. As programs and plans evolve or change, modifications and/or additions will be made to the data and other information in this chapter. It is expected that the quality and accuracy of the data will improve with each annual revision of this document, thus improving the usefulness of the data for program planning and decision purposes.

Early TRUW inventory practices were not as stringent as those of today in regard to requirements for waste identification, categorization, and segregation. Consequently, the early inventory data are based largely on process knowledge and on various studies and summaries related to site-specific practices.[3] As these efforts continue and TRUW is further characterized by radioassay, significant revisions in the estimated overall quantities of TRUW are anticipated.

3.2.2 Site Locations—Summarized Volumes and Radioactivity

TRUW management activities (generation, retrievable storage, etc.) are performed at six major and fourteen minor DOE sites. The major sites, from the standpoint of TRUW quantities, are (1) the Hanford Site (HANF), (2) Idaho National Engineering Laboratory (INEL), (3) Los Alamos National Laboratory (LANL), (4) Oak Ridge National Laboratory (ORNL), (5) Rocky Flats Plant (RFP), and (6) the Savannah River Site (SRS). HANF and RFP no longer generate TRUW as part of weapons production processes but do generate TRUW as part of environmental restoration (cleanup) activities. The fourteen minor sites are (1) Ames Laboratory (AMES), (2) Argonne National Laboratory–East (ANL–E), (3) Bettis Atomic Power Laboratory (BAPL), (4) Knolls Atomic Power Laboratory (KAPL), (5) Lawrence Berkeley Laboratory (LBL), (6) Lawrence Livermore National Laboratory (LLNL), (7) Mound Laboratory (MOUND), (8) Nevada Test Site (NTS), (9) Paducah Gaseous Diffusion Plant (PAD), (10) Pantex Plant (PANT), (11) Sandia National Laboratory (SNL/NM), (12) (6) Santa Susana Field Laboratory (SSFL) [also referred to as the Energy Technology Engineering Center (ETEC)], (13) University of Missouri (MURR), and (14) West Valley Demonstration Project (WVDP). Figure 3.1 shows the locations of the sites that store the largest quantities of TRUW and gives an approximate indication of the relative volumes of TRUW stored at each site. Figure 3.2 shows the volumes of CH and RH retrievably stored TRUW at the major sites and clearly shows that the preponderance of TRUW volume is in the CH category. Figure 3.3 shows the decayed radioactivities of retrievably stored CH and RH TRUW at the major sites as of December 31, 1993.

3

3.2.3 Development of Detailed Inventory Data

Last year's IDB described recent changes in the manner in which TRUW data were collected, reviewed, and used.[4] This year, the data collection process for the IDB was adjusted somewhat to allow for the priority collection of data for the WIPP Baseline Inventory Report.

3.2.3.1 Site data submittal process

All of the quantitative TRUW data in the IDB are ultimately derived from the site data submittals. The sites supply volumes, radionuclide compositions, and curies of each radionuclide added in each year of TRUW accumulation. This is done for each TRUW type (CH stored, RH stored, CH buried, and RH buried). The annual radioactivities in the site submittals are on an as-stored basis; that is, they represent the curies of each radionuclide added each year at the end of the year in which the waste was placed in storage. The data are entered by the sites on standardized forms. The complete set of TRUW site data submittals for this year's IDB is listed as ref. 5 (Sect. 3.6). In a few cases, it was found necessary to use last year's submittal to the IDB because no submittal was received this year.

3.2.3.2 Site data review and modification

The site data submittals for TRUW were reviewed to make certain, insofar as possible, that the data supplied met the requirements of completeness and consistency. The data review process included modifying the formats of the data so that they could be easily converted to input data files for use in the decay calculations.

3.2.3.3 As-stored volumes and radioactivities

Tables 3.1 through 3.3 summarize a small portion of the information in the site submittals. These tables show the volumes and cumulative as-stored (undecayed) radioactivities of retrievably stored CH and RH TRUW at each site in 5-year increments from 1970 to 1990 and at the end of 1993. Table 3.2 shows total radioactivities (i.e., all radionuclides included), and Table 3.3 shows TRU radioactivity (i.e., only TRU radionuclides included).

3.2.3.4 Calculation of annual decayed radioactivities

As described in last year's IDB report, a computer code converts the annual as-stored radioactivities to annual decayed radioactivities and accumulates these quantities to produce tables showing decayed grams, curies, and watts on a year-by-year, site-by-site, and radionuclide-by-radionuclide basis. Annual added volumes and cumulative volumes are also shown. Volumes are assumed to be unaffected by decay.

In a number of cases, the site-submitted data were not sufficiently detailed to permit the desired decay calculations. The difficulty most frequently encountered was that radionuclide compositions were not adequately specified on a radionuclide-by-radionuclide basis. In some cases, data conversion codes were used to convert site-supplied input data to the radionuclide-specific forms required for decay calculations. These codes were used as follows:

1. Where the site-supplied data called for mixtures of fission products but did not give quantitative composition data for such mixtures, the assumption was made that the isotopic composition was the same as that specified by Hanford in their submittal to last year's (Rev. 9) IDB report.

2. Certain parent fission products are always accompanied by short-lived daughters. Short-lived daughter fission products are added in cases where the site submittal shows the parent but does not specifically show the daughter and it is clear that the daughter must be present. For example, if a site shows 100 Ci of ^{90}Sr but does not show any ^{90}Y, it is assumed that the 100 Ci is the total activity of parent and daughter and the input is changed to 50 Ci ^{90}Sr and 50 Ci ^{90}Y. Other fission product parent-daughter combinations are handled in the same manner, using the appropriate curie ratio for each combination.

3.2.4 Results of Inventory Calculations

3.2.4.1 Retrievably stored wastes

Tables 3.4 and 3.5 show the cumulative decayed radioactivities of retrievably stored CH and RH TRUWs for each of the sites by 5-year increments from 1970 through 1990 and at the end of 1993. These tables are analogous to Tables 3.2 and 3.3, except that in Tables 3.4 and 3.5 the radioactivities are on a decayed basis; that is, they take into account the processes of radioactive decay and ingrowth of radioactive daughters. As before, Table 3.4 shows total radioactivities (all radionuclides included), and Table 3.5 shows only the radioactivities of TRU radionuclides. As previously stated, it is assumed throughout the tables that volumes of TRUW are not affected by radioactive decay.

Tables 3.6 and 3.7 summarize the total system inventories (i.e., all sites combined) of retrievably stored CH and RH TRUWs at DOE sites for the end of each year from 1970 to 1993. The cumulative masses, radioactivities, and thermal powers shown in these tables are decayed values. The difference between Tables 3.6 and 3.7 is that the masses, radioactivities, and thermal powers in Table 3.6 are based on all the radionuclides in the waste, whereas the quantities shown in Table 3.7 include only the contributions of the TRU radionuclides; daughters of TRU nuclides are not included in Table 3.7.

3.2.4.2 Buried TRUW

Buried TRUW volumes and radioactivities are shown in Tables 3.8 through 3.12. These are based on data provided in the site submittals. The form of the site-submitted data for buried waste is identical to that of the retrievably stored waste except that no distinction is made between CH and RH buried wastes. The buried waste tables (Tables 3.8 through 3.12) are analogous in form and information content to the retrievably stored waste tables (Tables 3.1 through 3.7) and follow the same general sequence. Table 3.8 shows as-stored volumes by sites and time periods. Tables 3.9 and 3.10 show cumulative as-stored total and TRU-only radioactivities by sites and time periods. Tables 3.11 and 3.12 show cumulative decayed total and TRU-only radioactivities. In these tables, "total" radioactivity means that all radionuclides are included, and "TRU-only" radioactivity means that only TRU nuclides are included.

3.2.4.3 Contaminated soil

Over the years, many of the older buried waste containers have developed leaks and contaminated the adjacent soil. Also, at some sites, soil has become contaminated by liquid spills or has been used as an ion-exchange medium for dilute liquid waste streams. It is difficult to make accurate estimates of the actual quantity of contaminated soil. The data reported by the sites are shown in Table 3.13. Additional characterization efforts will be required to reduce the uncertainties in these data.

3.3 ESTIMATED MIXED WASTE CONTENT OF TRUW

The sites were requested to submit estimates of the volumes of retrievably stored CH and RH TRUWs that might fall into the category of mixed TRUWs. These estimates were requested for three time periods: 1970–1986, 1987–1993, and 1994. Table 3.14 summarizes the site-submitted estimates of these volumes.

3.4 PROJECTED FUTURE QUANTITIES OF TRUW

Table 3.15 shows the data submitted by the sites for estimated future volumes of TRUW generation. The sites were not requested to estimate the radioactivities or isotopic compositions of these wastes, since it was felt that there would be little basis for such estimates. The estimated volumes are given in terms of average annual rates (m^3/year) for seven time periods from 1994 to 2020. An effort was made to obtain estimated rates in three categories: (1) general operations, (2) D&D, and (3) remedial action. The estimated effect of volume-reduction processes was also requested; however, little information on this was available.

3.5 TRUW DISPOSAL

The goals of the DOE TRUW Program are to terminate interim storage and achieve permanent disposal of all DOE TRUW.[6] One of the major efforts in this direction is the WIPP project. As stated in Public Law 96–164,[7] the WIPP project was to be constructed ". . . as a defense activity of the DOE for the purpose of providing a research and development facility to demonstrate the safe disposal of radioactive waste resulting from defense activities and programs of the United States." Construction of the facility is now essentially complete, and WIPP is now the only facility specifically designed for isolation of TRUW. It is designed to emplace about 175,000 m^3 of TRUW 650 m below ground in a mined salt formation.

Waste received at WIPP must meet the WIPP-WAC and associated quality assurance requirements specified in WIPP/DOE-069.[8] A number of other approvals remain to be completed before DOE can begin disposal operations at the facility. As previously stated, a test program of approximately 4 years will be conducted to ensure that the wastes to be shipped to WIPP, and their emplacement at WIPP, will comply with all applicable federal and state regulations. If the test phase is successful and all necessary approvals are obtained, it is planned that shipment and emplacement of wastes will begin and will continue through approximately the year 2018.

In 1993, the WIPP Legislative Land Withdrawal Act was passed, confirming congressional intent to have DOE continue with development and permitting of the facility. Since then, the DOE has stated its intent to accelerate processes leading to the start of waste disposal operations at the WIPP.

3.6 REFERENCES

1. U.S. Department of Energy, *Radioactive Waste Management*, DOE Order 5820.2A, Washington, D.C. (Sept. 26, 1988).

2. K. S. Hollingsworth, *Policy Statement Regarding Solid Waste Burial*, AEC Directive IAD No. 0511-21, Washington, D.C. (Mar. 20, 1970).

3. U.S. Department of Energy, *Defense Waste Management Plan for Buried Transuranic-Contaminated Waste, Transuranic-Contaminated Soil, and Difficult-to-Certify Transuranic Waste*, DOE/DP-0044, Washington, D.C. (June 1987).

4. U.S. Department of Energy, *Integrated Data Base for 1993: U.S. Spent Fuel and Radioactive Waste Inventories, Projections, and Characteristics*, DOE/RW-0006, Rev. 9, Oak Ridge National Laboratory, Oak Ridge, Tennessee (March 1994).

5. DOE site TRUW data submittal attachments, submitted to the IDB Program during September-December 1994. The following TRUW submittals were received and reviewed by MACTEC and the IDB Program before analysis and integration. Preceding each submittal is the site (in parentheses) to which it refers.

   a. (AMES) Kay M. Lampe Hannasch, Ames Laboratory, Ames, Iowa, correspondence to James E. Fletcher, DOE Chicago Operations Office, Argonne, Illinois, "Data Requests for TRU Waste, WIPP Baseline Inventory, IDB Request," dated Sept. 28, 1994.

   b. (ANL–E) Michael A. Sodaro, Argonne National Laboratory, Argonne, Illinois, correspondence to Jeff Williams, DOE Carlsbad Area Office, Argonne, Illinois, "WIPP TRU Baseline Inventory Report and Integrated Database Forecasts," dated Sept. 30, 1994.

   c. (ANL–W) No submittal provided.

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7

d. (ETEC) G. G. Gaylord, Rockwell International Corporation, Canoga Park, California, correspondence to Mark L. Matthews, DOE Carlsbad Area Office, Carlsbad, New Mexico, "TRU Inventory at ETEC," 94ETEC-DRF-1667, dated Oct. 31, 1994.

e. (HANF) R. D. Wojtasek, Westinghouse Hanford Company, Richland, Washington, correspondence to Lise Wachter, Martin Marietta Energy Systems, Inc., HAZWRAP, Oliver Springs, Tennessee, "Request for Office of Waste Management, Waste Information Update," 9305688B R1, dated Aug. 30, 1993. Also, F. M. Coony, Westinghouse Hanford Company, Richland, Washington, correspondence to E. W. Krieger, MAC Technical Services Company, Albuquerque, New Mexico, transmitting information on TRUW added to HANF inventory during CY 1993, dated Dec. 7, 1994.

f. (INEL) Joel T. Case, DOE Idaho Operations Office, Idaho Falls, Idaho, correspondence to Jim Teek, Advance Sciences, Inc., Albuquerque, New Mexico, "Integrated Data Base (IDB) TRU Waste 1994 Data Call," OPE-WM 94-308, dated Oct. 6, 1994.

g. (LANL) Davis Christensen, Los Alamos National Laboratory, Los Alamos, New Mexico, correspondence to Mark L. Matthews, DOE Carlsbad Area Office, Carlsbad, New Mexico, "WIPP Transuranic Waste Baseline Inventory Report," CST14-94-061, Nov. 1, 1994.

h. (LBL) Tim Wan, University of California, Berkeley, California, correspondence to Jeff Williams, DOE Carlsbad Area Office, Carlsbad, New Mexico, "Data Package for the Waste Isolation Pilot plant TRU Waste Baseline Inventory Report," HW-94-342, dated Sept. 13, 1994.

i. (LLNL) Roy Kearns, DOE Oakland Operations Office, Oakland, California, correspondence to Jeff Williams, DOE Carlsbad Area Office, Carlsbad, New Mexico, "Waste Isolation Pilot Plant Transuranic Integrated Database for Lawrence Livermore," 94W399/5484.a.13, dated Oct. 18, 1994.

j. (MOUND) Raymond J. Finney, EG&G Mound Applied Technologies, Miamisburg, Ohio, correspondence to Robert S. Rothman, DOE Miamisburg Area Office, Miamisburg, Ohio, "Response to the Waste Isolation Pilot Plant (WIPP) Transuranic Waste Baseline Inventory Report (WTWBIR) Data Package," dated Sept. 27, 1994.

k. (MURR) W. Derek Pickett, University of Missouri, Columbia, Missouri, correspondence to Jim Teek, Advanced Sciences, Inc., Albuquerque, New Mexico, transmitting MURR TRUW information and data for the WIPP TRUW Baseline Inventory Report and the IDB report (Rev. 10), dated Sept. 29, 1994.

l. (NR sites—BAPL) E. D. Shollenberger, DOE Pittsburgh Naval Reactors Office, West Mifflin, Pennsylvania, correspondence to Mark L. Matthews, DOE Carlsbad Area Office, Carlsbad, New Mexico, "Waste Isolation Pilot Project Transuranic Waste (TRU) Baseline Inventory Report and Updated Integrated Database TRU Information for the Bettis Atomic Power Laboratory," dated Oct. 21, 1994.

m. (NTS) Joseph M. Ginanni, DOE Nevada Operations Office, Las Vegas, Nevada, correspondence to Jerry Klein, Oak Ridge National Laboratory, Oak Ridge, Tennessee; Jim Teak, Advance Sciences, Inc., Albuquerque, New Mexico; and Jeff Williams, DOE Carlsbad Area Office, Carlsbad, New Mexico, "Nevada Test Site Transuranic and Mixed Transuranic Inventory Data for the 1994 Integrated Data Base Report (DOE/RW-0006, Rev. 10)," dated Oct. 14, 1994.

n. (ORNL) P. E. Arakawa, Oak Ridge National Laboratory, Oak Ridge, Tennessee, correspondence to Mac Roddye, DOE Oak Ridge Operations Office, Oak Ridge, Tennessee, "Complete Review and Revision of Data Package for the WIPP Transuranic Waste Baseline Inventory Report (WTWBIR)," dated Nov. 2, 1994.

o. (PAD) No submittal provided.

p. (PANT) D. L. Heim, DOE Amarillo Area Office, Amarillo, Texas, correspondence to Jeff Williams, DOE Carlsbad Area Office, Carlsbad, New Mexico, "WIPP Transuranic (TRU) Waste Baseline Inventory Report and Integrated Database Report," dated Sept. 28, 1994.

q. (RFP) G. A. O'Leary, EG&G Rocky Flats Inc., Golden Colorado, correspondence to Paul Drez, Drez and Associates, Albuquerque, New Mexico, "Transmittal of the Rocky Flats Environmental Technology Site (RFETS) Data Forms for the Waste Isolation Pilot Plant (WIPP) Transuranic (TRU) Waste Baseline Inventory Report (WTWBIR)—GAO-039-94," 94-RF-10526, dated Oct. 13, 1994.

r. (SNL/NM) No cover letter provided with site data submittal.

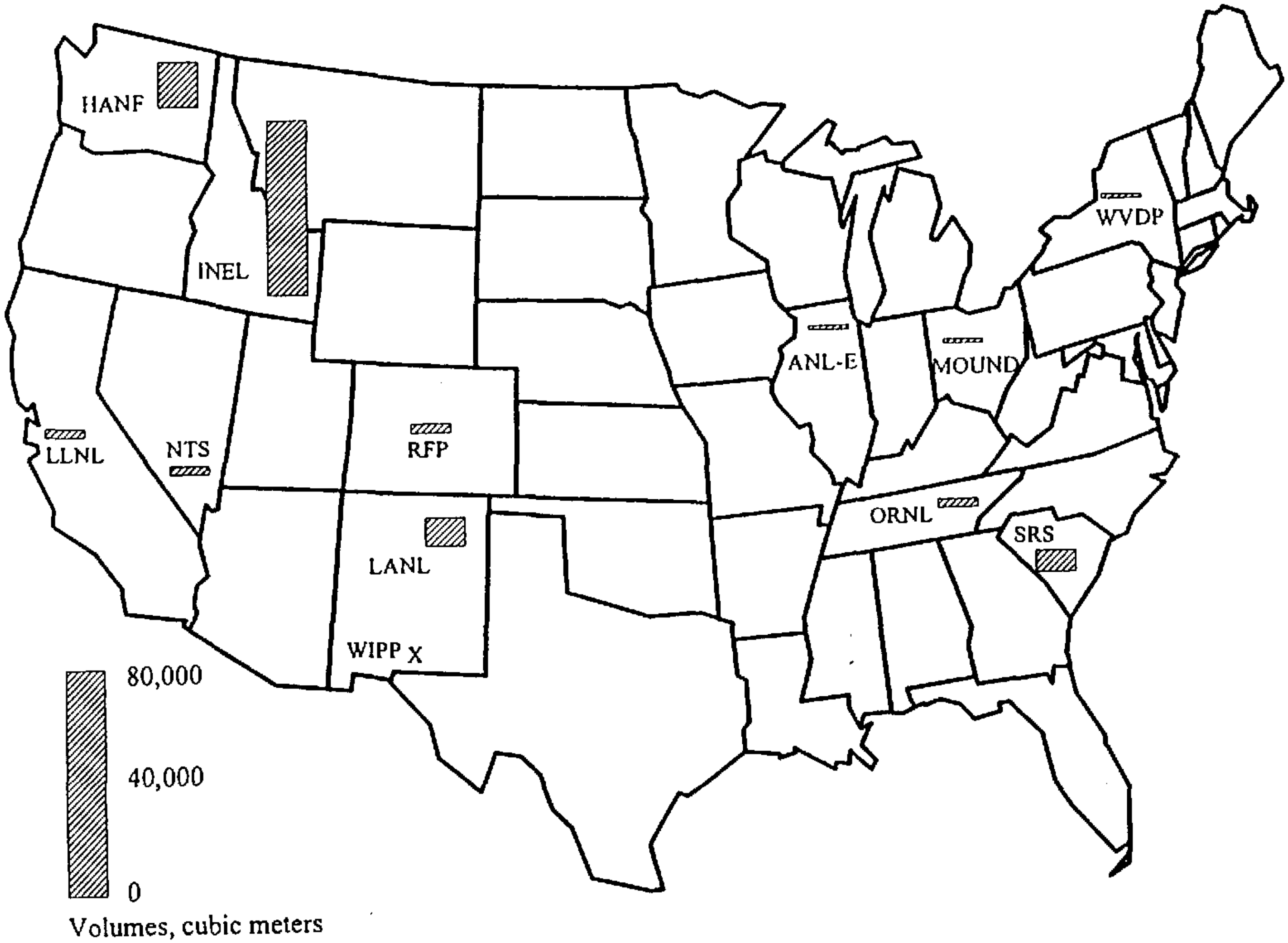
s. (SRS) S. J. Mentrup, Westinghouse Savannah River Company, Aiken, South Carolina, correspondence to Stan Massingill, DOE Savannah River Operations Office, Aiken, South Carolina, "SRS Data Package for WIPP TRU Waste Baseline Inventory Report (U)," SWE-SWE-94-0550, dated Oct. 12, 1994.

t. (WVDP) P. S. Klanian, West Valley Nuclear Services Company, Inc., West Valley, New York, correspondence to Jeff Williams, DOE Carlsbad Area Office, Carlsbad, New Mexico, "Data Package for WIPP Transuranic Waste Baseline Inventory Report (WTWBIR)," dated Nov. 14, 1994.

6. U.S. Department of Energy, *Long Range Master Plan for Defense Transuranic Waste Program*, DOE/WIPP 88-028, Carlsbad, New Mexico (December 1988).

7. U.S. Congress, Department of Energy National Security and Military Application of Nuclear Energy Authorization Act of 1980, Pub. L. 96–164 (1980).

8. U.S. Department of Energy, *TRU Waste Acceptance Criteria for the Waste Isolation Pilot Plant*, WIPP/DOE-069, Rev. 4, Carlsbad, New Mexico (December 1991).



X Waste Isolation Pilot Plant

NOTE: Sites having less than 10 cubic meters of stored TRUW are not shown.

Fig. 3.1. Locations and total volumes of retrievably stored DOE TRUW through 1993.

ORNL DWG 94-11356

Volume by site

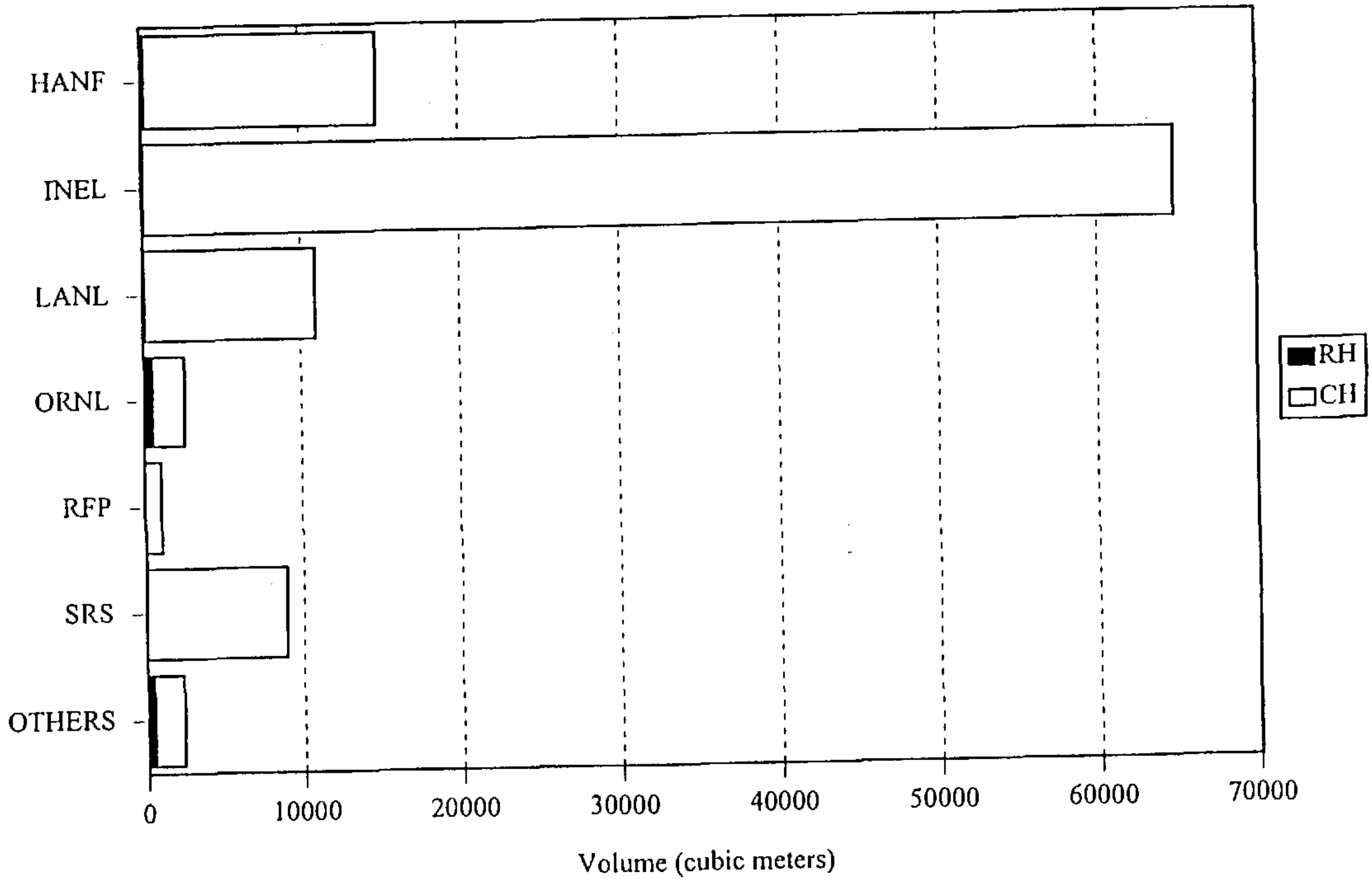


Fig. 3.2. Retrievably stored TRUW volumes at the end of 1993, by site.

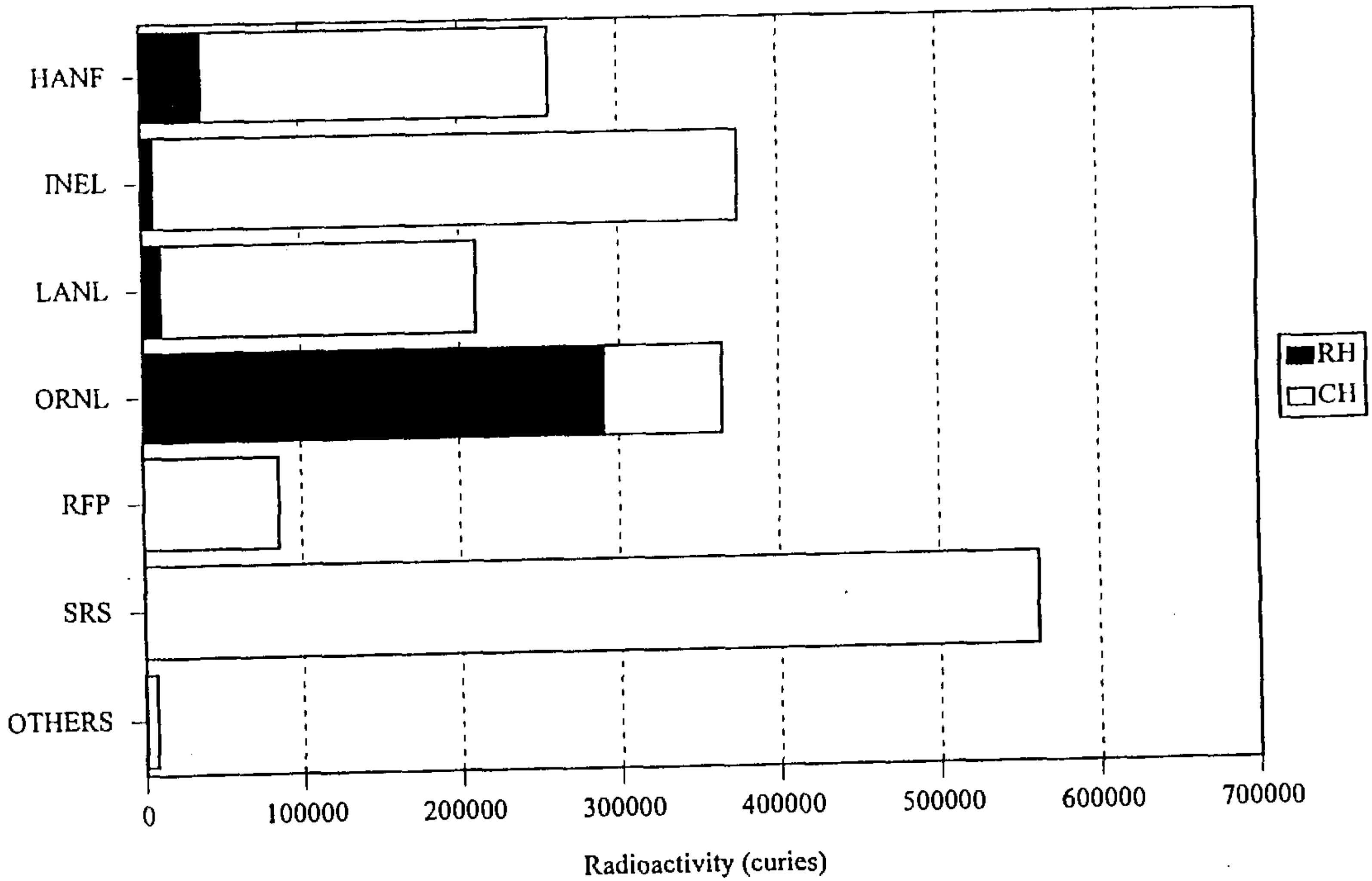


Fig. 3.3. Retrievably stored TRUW decayed radioactivity at the end of 1993, by site.

12

Table 3.1. Summary of retrievably stored TRUW by sites: cumulative as-stored volumes

Site name	Site acronym	Cumulative volume at end of calendar year, m³					
		1970	1975	1980	1985	1990	1993
Contact handled							
Ames Laboratory	AMES	0.0	0.0	0.0	0.0	0.0	0.0
Argonne National Laboratory–East	ANL–E	0.0	0.0	0.0	0.0	25.5	29.1
Energy Technology Engineering Center	ETEC	0.0	0.0	0.0	0.0	1.9	1.9
Hanford Site	HANF	745.2	5,541.6	10,086.3	14,668.9	15,282.3	15,608.9
Idaho National Engineering Laboratory	INEL	1,420.0	28,356.0	42,341.0	57,615.0	64,774.0	64,774.0
Knolls Atomic Power Laboratory	KAPL	0.0	0.0	0.0	0.0	0.0	0.0
Lawrence Berkeley Laboratory	LBL	0.0	0.0	0.0	0.4	0.8	0.9
Lawrence Livermore National Laboratory	LLNL	0.0	0.0	0.0	0.0	194.5	235.0
Los Alamos National Laboratory	LANL	0.0	3,352.3	5,963.6	8,800.5	10,357.3	10,810.9
Mound	MOUND	0.0	1.7	4.7	7.7	10.7	11.9
Nevada Test Site	NTS	0.0	34.9	177.9	550.2	606.8	607.1
Oak Ridge National Laboratory	ORNL	12.6	541.0	726.7	901.4	1,049.6	2,015.2
Paducah Gaseous Diffusion Plant	PAD	0.0	0.0	0.0	0.0	4.3	4.3
Pantex Plant	PANT	0.0	0.0	0.0	0.0	0.0	0.6
Rocky Flats Plant	RFP	0.0	0.0	0.0	0.0	952.0	1,040.0
Sandia National Laboratory/New Mexico	SNL/NM	0.0	0.0	0.0	0.0	0.0	0.9
Savannah River Site	SRS	0.0	603.5	1,752.3	3,849.4	7,334.7	8,925.9
University of Missouri	MURR	0.0	0.0	0.0	0.0	0.0	0.1
West Valley Demonstration Project	WVDP	0.0	0.0	0.0	0.0	0.0	49.1
Total		2,177.8	38,431.0	61,052.5	86,393.5	100,594.4	104,115.8
Remote handled							
Ames Laboratory	AMES	0.0	0.0	0.0	0.0	0.0	0.0
Argonne National Laboratory–East	ANL–E	0.0	0.0	0.0	0.0	0.0	1.7
Energy Technology Engineering Center	ETEC	0.0	0.0	0.0	0.0	0.0	0.0
Hanford Site	HANF	10.3	127.8	194.9	198.2	201.0	201.0
Idaho National Engineering Laboratory	INEL	0.0	0.0	17.6	48.8	73.8	79.8
Knolls Atomic Power Laboratory	KAPL	0.0	0.0	0.0	0.0	0.0	2.4
Lawrence Berkeley Laboratory	LBL	0.0	0.0	0.0	0.0	0.0	0.0
Lawrence Livermore National Laboratory	LLNL	0.0	0.0	0.0	0.0	0.0	0.0
Los Alamos National Laboratory	LANL	0.0	0.0	7.9	27.4	27.4	91.3
Mound	MOUND	0.0	0.0	0.0	0.0	0.0	0.0
Nevada Test Site	NTS	0.0	0.2	0.6	5.3	5.3	5.3

Table 3.1 (continued)

Site name	Site acronym	Cumulative volume at end of calendar year, m^3					
		1970	1975	1980	1985	1990	1993
Oak Ridge National Laboratory	ORNL	1.7	221.3	361.2	440.3	540.6	563.9
Paducah Gaseous Diffusion Plant	PAD	0.0	0.0	0.0	0.0	0.0	0.0
Pantex Plant	PANT	0.0	0.0	0.0	0.0	0.0	0.0
Rocky Flats Plant	RFP	0.0	0.0	0.0	0.0	0.0	0.9
Sandia National Laboratory/New Mexico	SNL/NM	0.0	0.0	0.0	0.0	0.0	0.0
Savannah River Site	SRS	0.0	0.0	0.0	0.0	0.0	0.0
University of Missouri	MURR	0.0	0.0	0.0	0.0	0.0	427.0
West Valley Demonstration Project	WVDP	0.0	0.0	0.0	0.0		
Total		12.0	349.3	582.2	720.0	540.6	1,373.3

Table 3.2. Summary of retrievably stored TRUW by sites: cumulative as-stored radioactivity (all radionuclides)

Site name	Site acronym	Cumulative as-stored radioactivity at end of calendar year, 10^3 Ci					
		1970	1975	1980	1985	1990	1993
Contact handled							
Ames Laboratory	AMES	0.00	0.00	0.00	0.00	0.00	0.00
Argonne National Laboratory–East	ANL–E	0.00	0.00	0.00	0.00	0.12	0.13
Energy Technology Engineering Center	ETEC	0.00	0.00	0.00	0.00	0.00	0.01
Hanford Site	HANF	1.05	19.61	191.49	278.45	325.62	331.57
Idaho National Engineering Laboratory	INEL	4.22	126.46	255.92	405.07	496.42	496.46
Knolls Atomic Power Laboratory	KAPL	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Berkeley Laboratory	LBL	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Livermore National Laboratory	LLNL	0.00	0.00	0.00	0.00	0.93	2.24
Los Alamos National Laboratory	LANL	0.00	49.18	108.46	151.01	212.92	218.96
Mound	MOUND	0.00	0.15	0.39	0.63	0.88	0.98
Nevada Test Site	NTS	0.00	0.25	1.12	3.30	4.00	4.00
Oak Ridge National Laboratory	ORNL	0.05	12.48	17.80	98.19	99.65	103.57
Paducah Gaseous Diffusion Plant	PAD	0.00	0.00	0.00	0.00	0.00	0.11
Pantex Plant	PANT	0.00	0.00	0.00	0.00	0.00	0.00
Rocky Flats Plant	RFP	0.00	0.00	0.00	0.00	48.66	93.59
Sandia National Laboratory/New Mexico	SNL/NM	0.00	0.00	0.00	0.00	0.00	0.00
Savannah River Site	SRS	0.00	277.35	376.09	575.83	654.14	664.48
University of Missouri	MURR	0.00	0.00	0.00	0.00	0.00	0.00
West Valley Demonstration Project	WVDP	0.00	0.00	0.00	0.03	0.05	0.05
Total		5.32	485.48	951.27	1,512.50	1,843.38	1,916.14
Remote handled							
Ames Laboratory	AMES	0.00	0.00	0.00	0.00	0.00	0.00
Argonne National Laboratory–East	ANL–E	0.00	0.00	0.00	0.00	0.00	0.01
Energy Technology Engineering Center	ETEC	0.00	0.00	0.00	0.00	0.00	0.00
Hanford Site	HANF	27.09	55.69	471.47	479.90	481.88	481.88
Idaho National Engineering Laboratory	INEL	0.00	0.00	0.49	4.93	10.53	10.64
Knolls Atomic Power Laboratory	KAPL	0.00	0.00	0.00	0.00	0.00	0.11
Lawrence Berkeley Laboratory	LBL	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Livermore National Laboratory	LLNL	0.00	0.00	0.00	0.00	0.00	0.00
Los Alamos National Laboratory	LANL	0.00	0.00	0.96	3.43	3.45	14.90
Mound	MOUND	0.00	0.00	0.00	0.00	0.00	0.00
Nevada Test Site	NTS	0.00	0.00	0.04	0.25	0.25	0.25

15

Table 3.2 (continued)

Site name	Site acronym	Cumulative as-stored radioactivity at end of calendar year, 10^3 Ci					
		1970	1975	1980	1985	1990	1993
Oak Ridge National Laboratory	ORNL	0.00	0.60	0.76	0.98	167.24	178.13
Paducah Gaseous Diffusion Plant	PAD	0.00	0.00	0.00	0.00	0.00	0.00
Pantex Plant	PANT	0.00	0.00	0.00	0.00	0.00	0.00
Rocky Flats Plant	RFP	0.00	0.00	0.00	0.00	0.00	0.00
Sandia National Laboratory/New Mexico	SNL/NM	0.00	0.00	0.00	0.00	0.00	0.00
Savannah River Site	SRS	0.00	0.00	0.00	0.00	0.00	0.00
University of Missouri	MURR	0.00	0.00	0.00	0.00	0.00	0.00
West Valley Demonstration Project	WVDP	0.00	0.00	0.00	0.00	0.00	0.00
Total		27.09	56.30	473.72	489.48	663.36	685.92

Table 3.3. Summary of retrievably stored TRUW by sites: cumulative as-stored radioactivity (TRU radionuclides only)

Site name	Site acronym	Cumulative as-stored radioactivity at end of calendar year, 10^3 Ci					
		1970	1975	1980	1985	1990	1993
		Contact handled					
Ames Laboratory	AMES	0.00	0.00	0.00	0.00	0.00	0.00
Argonne National Laboratory-East	ANL-E	0.00	0.00	0.00	0.00	0.04	0.05
Energy Technology Engineering Center	ETEC	0.00	0.00	0.00	0.00	0.00	0.00
Hanford Site	HANF	0.19	3.22	106.81	119.34	123.87	124.82
Idaho National Engineering Laboratory	INEL	1.52	50.87	122.85	183.83	205.34	205.35
Knolls Atomic Power Laboratory	KAPL	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Berkeley Laboratory	LBL	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Livermore National Laboratory	LLNL	0.00	0.00	0.00	0.00	0.15	0.35
Los Alamos National Laboratory	LANL	0.00	48.66	104.85	144.69	206.42	212.47
Mound	MOUND	0.00	0.15	0.39	0.63	0.88	0.98
Nevada Test Site	NTS	0.00	0.24	0.97	3.01	3.29	3.29
Oak Ridge National Laboratory	ORNL	0.01	6.28	6.59	9.89	10.01	10.73
Paducah Gaseous Diffusion Plant	PAD	0.00	0.00	0.00	0.00	0.00	0.11
Pantex Plant	PANT	0.00	0.00	0.00	0.00	0.00	0.00
Rocky Flats Plant	RFP	0.00	0.00	0.00	0.00	12.73	28.06
Sandia National Laboratory/New Mexico	SNL/NM	0.00	0.00	0.00	0.00	0.00	0.00
Savannah River Site	SRS	0.00	250.87	335.90	505.74	549.61	558.85
University of Missouri	MURR	0.00	0.00	0.00	0.00	0.00	0.00
West Valley Demonstration Project	WVDP	0.00	0.00	0.00	0.00	0.00	0.00
Total		1.72	360.30	678.36	967.12	1,112.35	1,145.05
		Remote handled					
Ames Laboratory	AMES	0.00	0.00	0.00	0.00	0.00	0.00
Argonne National Laboratory-East	ANL-E	0.00	0.00	0.00	0.00	0.00	0.00
Energy Technology Engineering Center	ETEC	0.00	0.00	0.00	0.00	0.00	0.00
Hanford Site	HANF	0.02	0.19	0.41	0.52	0.56	0.56
Idaho National Engineering Laboratory	INEL	0.00	0.00	0.01	0.03	0.10	0.10
Knolls Atomic Power Laboratory	KAPL	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Berkeley Laboratory	LBL	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Livermore National Laboratory	LLNL	0.00	0.00	0.00	0.00	0.00	0.00
Los Alamos National Laboratory	LANL	0.00	0.00	0.04	0.09	0.09	0.23
Mound	MOUND	0.00	0.00	0.00	0.00	0.00	0.00
Nevada Test Site	NTS	0.00	0.00	0.00	0.00	0.00	0.00

17

Table 3.3 (continued)

Site name	Site acronym	Cumulative as-stored radioactivity at end of calendar year, 10^3 Ci					
		1970	1975	1980	1985	1990	1993
Oak Ridge National Laboratory	ORNL	0.00	0.02	0.03	0.05	1.06	1.12
Paducah Gaseous Diffusion Plant	PAD	0.00	0.00	0.00	0.00	0.00	0.00
Pantex Plant	PANT	0.00	0.00	0.00	0.00	0.00	0.00
Rocky Flats Plant	RFP	0.00	0.00	0.00	0.00	0.00	0.00
Sandia National Laboratory/New Mexico	SNL/NM	0.00	0.00	0.00	0.00	0.00	0.00
Savannah River Site	SRS	0.00	0.00	0.00	0.00	0.00	0.00
University of Missouri	MURR	0.00	0.00	0.00	0.00	0.00	0.00
West Valley Demonstration Project	WVDP	0.00	0.00	0.00	0.00	0.00	0.00
Total		0.02	0.21	0.49	0.69	1.81	2.01

Table 3.4. Summary of retrievably stored TRUW by sites: cumulative decayed radioactivity (all radionuclides)

Site name	Site acronym	Cumulative decayed radioactivity at end of calendar year, 10³ Ci					
		1970	1975	1980	1985	1990	1993
Contact handled							
Ames Laboratory	AMES	0.00	0.00	0.00	0.00	0.00	0.00
Argonne National Laboratory–East	ANL–E	0.00	0.00	0.00	0.00	0.11	0.11
Energy Technology Engineering Center	ETEC	0.00	0.00	0.00	0.00	0.00	0.01
Hanford Site	HANF	1.05	18.23	183.76	244.40	229.40	218.06
Idaho National Engineering Laboratory	INEL	4.22	120.86	230.01	348.66	393.67	366.95
Knolls Atomic Power Laboratory	KAPL	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Berkeley Laboratory	LBL	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Livermore National Laboratory	LLNL	0.00	0.00	0.00	0.00	0.89	2.06
Los Alamos National Laboratory	LANL	0.00	48.71	102.16	140.90	195.36	198.40
Mound	MOUND	0.00	0.15	0.38	0.61	0.83	0.91
Nevada Test Site	NTS	0.00	0.26	1.11	3.26	3.86	3.78
Oak Ridge National Laboratory	ORNL	0.05	11.26	19.60	94.42	78.82	74.09
Paducah Gaseous Diffusion Plant	PAD	0.00	0.00	0.00	0.00	0.00	0.11
Pantex Plant	PANT	0.00	0.00	0.00	0.00	0.00	0.00
Rocky Flats Plant	RFP	0.00	0.00	0.00	0.00	47.04	85.49
Sandia National Laboratory/New Mexico	SNL/NM	0.00	0.00	0.00	0.00	0.00	0.00
Savannah River Site	SRS	0.00	269.15	351.45	527.25	571.85	561.52
University of Missouri	MURR	0.00	0.00	0.00	0.00	0.00	0.00
West Valley Demonstration Project	WVDP	0.00	0.00	0.00	0.03	0.05	0.04
Total		5.32	468.62	888.47	1,359.53	1,521.88	1,511.54
Remote handled							
Ames Laboratory	AMES	0.00	0.00	0.00	0.00	0.00	0.00
Argonne National Laboratory–East	ANL–E	0.00	0.00	0.00	0.00	0.00	0.02
Energy Technology Engineering Center	ETEC	0.00	0.00	0.00	0.00	0.00	0.00
Hanford Site	HANF	27.09	28.85	293.19	64.16	45.02	38.44
Idaho National Engineering Laboratory	INEL	0.00	0.00	0.58	7.03	9.10	7.79
Knolls Atomic Power Laboratory	KAPL	0.00	0.00	0.00	0.00	0.00	0.10
Lawrence Berkeley Laboratory	LBL	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Livermore National Laboratory	LLNL	0.00	0.00	0.00	0.00	0.00	0.00
Los Alamos National Laboratory	LANL	0.00	0.00	0.88	0.73	0.36	11.80
Mound	MOUND	0.00	0.00	0.00	0.00	0.00	0.00
Nevada Test Site	NTS	0.00	0.00	0.04	0.23	0.19	0.17

Table 3.4 (continued)

Site name	Site acronym	Cumulative as-stored radioactivity at end of calendar year, 10^3 Ci					
		1970	1975	1980	1985	1990	1993
Oak Ridge National Laboratory	ORNL	0.00	0.53	0.51	0.60	295.02	290.20
Paducah Gaseous Diffusion Plant	PAD	0.00	0.00	0.00	0.00	0.00	0.00
Pantex Plant	PANT	0.00	0.00	0.00	0.00	0.00	0.00
Rocky Flats Plant	RFP	0.00	0.00	0.00	0.00	0.00	0.00
Sandia National Laboratory/New Mexico	SNL/NM	0.00	0.00	0.00	0.00	0.00	0.00
Savannah River Site	SRS	0.00	0.00	0.00	0.00	0.00	0.00
University of Missouri	MURR	0.00	0.00	0.00	0.00	0.00	0.00
West Valley Demonstration Project	WVDP	0.00	0.00	0.00	0.00	0.00	0.00
Total		27.09	29.38	295.20	72.75	349.69	348.53

20

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Table 3.5. Summary of retrievably stored TRUW by sites: cumulative decayed radioactivity (TRU radionuclides only)

Site name	Site acronym	Cumulative decayed radioactivity at end of calendar year, 10^3 Ci					
		1970	1975	1980	1985	1990	1993
		Contact handled					
Ames Laboratory	AMES	0.00	0.00	0.00	0.00	0.00	0.00
Argonne National Laboratory–East	ANL–E	0.00	0.00	0.00	0.00	0.04	0.05
Energy Technology Engineering Center	ETEC	0.00	0.00	0.00	0.00	0.00	0.00
Hanford Site	HANF	0.19	3.25	107.01	116.77	118.79	118.24
Idaho National Engineering Laboratory	INEL	1.52	50.91	122.40	181.58	201.41	200.38
Knolls Atomic Power Laboratory	KAPL	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Berkeley Laboratory	LBL	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Livermore National Laboratory	LLNL	0.00	0.00	0.00	0.00	0.15	0.35
Los Alamos National Laboratory	LANL	0.00	48.36	101.55	137.44	194.68	197.92
Mound	MOUND	0.00	0.15	0.38	0.61	0.83	0.91
Nevada Test Site	NTS	0.00	0.24	0.96	3.00	3.27	3.27
Oak Ridge National Laboratory	ORNL	0.01	6.14	6.27	9.45	9.83	10.65
Paducah Gaseous Diffusion Plant	PAD	0.00	0.00	0.00	0.00	0.00	0.11
Pantex Plant	PANT	0.00	0.00	0.00	0.00	0.00	0.00
Rocky Flats Plant	RFP	0.00	0.00	0.00	0.00	12.77	28.27
Sandia National Laboratory/New Mexico	SNL/NM	0.00	0.00	0.00	0.00	0.00	0.00
Savannah River Site	SRS	0.00	243.64	318.77	473.72	499.52	497.85
University of Missouri	MURR	0.00	0.00	0.00	0.00	0.00	0.00
West Valley Demonstration Project	WVDP	0.00	0.00	0.00	0.00	0.00	0.00
Total		1.72	352.69	657.35	922.56	1,041.30	1,058.01
		Remote handled					
Ames Laboratory	AMES	0.00	0.00	0.00	0.00	0.00	0.00
Argonne National Laboratory–East	ANL–E	0.00	0.00	0.00	0.00	0.00	0.00
Energy Technology Engineering Center	ETEC	0.00	0.00	0.00	0.00	0.00	0.00
Hanford Site	HANF	0.02	0.20	0.44	0.60	0.67	0.70
Idaho National Engineering Laboratory	INEL	0.00	0.00	0.01	0.03	0.10	0.10
Knolls Atomic Power Laboratory	KAPL	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Berkeley Laboratory	LBL	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Livermore National Laboratory	LLNL	0.00	0.00	0.00	0.00	0.00	0.00
Los Alamos National Laboratory	LANL	0.00	0.00	0.04	0.09	0.09	0.23
Mound	MOUND	0.00	0.00	0.00	0.00	0.00	0.00
Nevada Test Site	NTS	0.00	0.00	0.00	0.00	0.00	0.00

Table 3.5 (continued)

Site name	Site acronym	Cumulative as-stored radioactivity at end of calendar year, 10^3 Ci					
		1970	1975	1980	1985	1990	1993
Oak Ridge National Laboratory	ORNL	0.00	0.02	0.03	0.05	1.04	1.07
Paducah Gaseous Diffusion Plant	PAD	0.00	0.00	0.00	0.00	0.00	0.00
Pantex Plant	PANT	0.00	0.00	0.00	0.00	0.00	0.00
Rocky Flats Plant	RFP	0.00	0.00	0.00	0.00	0.00	0.00
Sandia National Laboratory/New Mexico	SNL/NM	0.00	0.00	0.00	0.00	0.00	0.00
Savannah River Site	SRS	0.00	0.00	0.00	0.00	0.00	0.00
University of Missouri	MURR	0.00	0.00	0.00	0.00	0.00	0.00
West Valley Demonstration Project	WVDP	0.00	0.00	0.00	0.00	0.00	0.00
Total		0.02	0.22	0.52	0.76	1.91	2.10

Table 3.6. Retrievably stored TRUW inventories and decayed characteristics, total of all sites, all radionuclides included

End of calendar year	Volume (m^3)		Total mass[a] (kg)		Radioactivity (10^3 Ci)		Thermal power (10^3 W)	
	Annual	Cumulative	Annual	Cumulative	Annual	Cumulative	Annual	Cumulative
Contact handled								
1970	2,177.8	2,177.8	47.1	47.1	5.32	5.32	0.06	0.06
1971	8,955.7	11,133.4	331.3	378.4	233.12	238.26	7.28	7.34
1972	7,542.4	18,675.8	1,087.9	1,466.3	69.46	305.13	1.66	8.95
1973	7,120.4	25,796.2	131.8	1,598.1	29.88	331.29	0.46	9.34
1974	5,746.9	31,543.1	3,950.9	5,549.1	69.27	396.17	1.64	10.91
1975	6,887.8	38,430.9	885.6	6,434.6	78.44	468.62	0.94	11.77
1976	2,464.9	40,895.7	4,374.6	10,809.2	48.80	509.33	1.19	12.88
1977	5,651.9	46,547.6	730.3	11,539.5	64.83	565.33	1.39	14.18
1978	4,016.0	50,563.7	192.1	11,731.6	67.58	622.07	1.58	15.66
1979	5,421.1	55,984.7	3,403.2	15,134.8	91.29	707.17	1.77	17.35
1980	5,067.7	61,052.4	4,611.1	19,745.9	193.29	888.47	4.62	21.86
1981	5,255.1	66,307.5	1,105.3	20,851.2	100.30	973.81	2.16	23.88
1982	4,967.6	71,275.1	1,082.9	21,934.2	102.40	1,059.86	2.38	26.11
1983	4,634.3	75,909.3	1,238.3	23,172.4	84.72	1,126.81	2.03	27.95
1984	5,045.9	80,955.2	734.0	23,906.4	154.89	1,265.86	1.31	29.07
1985	5,438.2	86,393.5	307.7	24,214.1	118.93	1,359.53	1.72	30.61
1986	5,337.0	91,730.5	375.8	24,589.9	114.44	1,439.14	1.30	31.68
1987	3,147.9	94,878.3	466.7	25,056.7	75.36	1,473.21	1.22	32.66
1988	2,631.6	97,509.9	294.6	25,351.2	52.01	1,491.59	0.97	33.42
1989	1,698.2	99,208.1	231.6	25,582.9	44.67	1,506.22	0.65	33.87
1990	1,386.4	100,594.4	209.1	25,792.0	44.38	1,521.88	0.61	34.30
1991	1,717.2	102,311.7	155.5	25,947.5	35.31	1,528.99	0.60	34.71
1992	361.4	102,673.0	96.4	26,043.9	26.16	1,527.58	0.25	34.78
1993	1,442.8	104,115.9	125.6	26,169.5	11.29	1,511.54	0.22	34.81
Remote handled								
1970	12.0	12.0	29.6	29.6	27.09	27.09	0.32	0.32
1971	15.9	27.8	22.5	52.1	7.85	29.95	0.09	0.36
1972	94.9	122.8	12.1	64.2	2.86	28.48	0.03	0.34
1973	59.8	182.5	0.5	64.7	7.73	32.42	0.04	0.34
1974	41.1	223.6	0.8	65.4	5.88	31.46	0.02	0.31
1975	125.7	349.3	1.4	66.8	4.88	29.38	0.05	0.31
1976	76.6	425.9	2.7	69.5	5.25	30.00	0.02	0.29
1977	56.6	482.5	2.1	71.6	14.35	38.75	0.16	0.41
1978	49.4	531.9	2.9	74.5	1.12	34.05	0.00	0.35
1979	23.1	555.0	8.1	82.5	234.91	265.11	1.10	1.41
1980	27.1	582.1	3.7	86.2	161.78	295.20	0.69	1.47
1981	33.2	615.4	9.5	95.7	5.13	164.14	0.05	0.88
1982	33.1	648.4	2.9	98.6	3.33	115.24	0.02	0.64
1983	34.2	682.6	15.6	114.2	3.80	92.69	0.01	0.52
1984	20.8	703.5	12.1	126.2	0.78	77.57	0.01	0.44
1985	16.5	720.0	3.1	129.3	2.73	72.75	0.01	0.40
1986	18.8	738.8	2.4	131.6	1.39	66.14	0.01	0.37
1987	88.8	827.6	6,456.0	6,587.6	19.45	97.62	0.04	0.46
1988	5.2	832.8	3.5	6,591.2	4.12	98.46	0.01	0.45
1989	3.3	836.1	153,569.2	160,160.4	144.29	355.44	0.40	1.43
1990	12.0	848.1	4,625.7	164,786.1	4.64	349.69	0.01	1.39
1991	55.9	903.9	6,475.8	171,261.9	6.12	349.21	0.02	1.38

001217

33

Table 3.6 (continued)

End of calendar year	Volume (m^3)		Total mass[a] (kg)		Radioactivity (10^3 Ci)		Thermal power (10^3 W)	
	Annual	Cumulative	Annual	Cumulative	Annual	Cumulative	Annual	Cumulative
Remote handled (continued)								
1992	435.9	1,339.9	5,088.1	176,350.0	4.89	347.22	0.01	1.36
1993	33.3	1,373.2	2.2	176,352.3	11.56	348.53	0.04	1.34
Total								
1970	2,189.7	2,189.7	76.7	76.7	32.41	32.41	0.38	0.38
1971	8,971.5	11,161.3	353.8	430.5	240.98	268.21	7.37	7.70
1972	7,637.3	18,798.5	1,100.0	1,530.5	72.32	333.61	1.70	9.29
1973	7,180.2	25,978.7	132.3	1,662.8	37.60	363.70	0.49	9.67
1974	5,788.0	31,766.7	3,951.7	5,614.5	75.15	427.63	1.66	11.21
1975	7,013.5	38,780.2	8,87.0	6,501.4	83.32	497.99	1.00	12.08
1976	2,541.5	41,321.6	4,377.2	10,878.7	54.05	539.34	1.22	13.17
1977	5,708.5	47,030.1	732.4	11,611.1	79.18	604.08	1.55	14.58
1978	4,065.4	51,095.6	195.0	11,806.1	68.70	656.12	1.59	16.01
1979	5,444.2	56,539.7	3,411.3	15,217.4	326.20	972.28	2.87	18.76
1980	5,094.8	61,634.5	4,614.8	19,832.1	355.08	1,183.66	5.32	23.33
1981	5,288.3	66,922.9	1,114.8	20,946.9	105.42	1,137.95	2.20	24.76
1982	5,000.6	71,923.5	1,085.8	22,032.7	105.73	1,175.10	2.40	26.75
1983	4,668.5	76,592.0	1,253.9	23,286.6	88.52	1,219.51	2.04	28.47
1984	5,066.8	81,658.7	746.0	24,032.6	155.67	1,343.43	1.32	29.51
1985	5,454.8	87,113.5	310.7	24,343.4	121.66	1,432.28	1.73	31.01
1986	5,355.7	92,469.2	378.2	24,721.6	115.83	1,505.28	1.32	32.05
1987	3,236.7	95,705.9	6,922.7	31,644.3	94.81	1,570.83	1.26	33.12
1988	2,636.8	98,342.6	298.1	31,942.4	56.13	1,590.06	0.98	33.87
1989	1,701.5	100,044.1	153,800.8	185,743.2	188.96	1,861.65	1.05	35.31
1990	1,398.4	101,442.5	4,834.8	190,578.0	49.01	1,871.57	0.63	35.69
1991[b]	1,773.1	103,215.6	6,631.3	197,209.4	41.42	1,878.20	0.62	36.09
1992	797.3	104,012.9	5,184.5	202,393.9	31.05	1,874.81	0.27	36.13
1993	1,476.1	105,489.0	127.9	202,521.8	22.86	1,860.07	0.26	36.16

[a]Mass means mass of radionuclides, not of total waste.
[b]SRS CH waste data not available for individual years prior to 1991 but is included in totals for years 1991 and 1992.

001313

24

Table 3.7. Retrievably stored TRUW inventories and decayed characteristics, total of all sites, TRU radionuclides only included[a]

End of calendar year	Volume (m³)		TRU mass[b] (kg)		TRU radioactivity (10^3 Ci)		TRU thermal power (10^3 W)	
	Annual	Cumulative	Annual	Cumulative	Annual	Cumulative	Annual	Cumulative
Contact handled								
1970	2,177.8	2,177.8	8.3	8.3	1.72	1.72	0.06	0.06
1971	8,955.7	11,133.4	39.3	47.6	219.37	221.09	7.26	7.31
1972	7,542.4	18,675.8	39.8	87.4	49.88	269.32	1.65	8.91
1973	7,120.4	25,796.2	40.0	127.4	12.09	279.51	0.39	9.24
1974	5,746.9	31,543.1	51.6	179.1	48.79	326.41	1.61	10.78
1975	6,887.8	38,430.9	77.6	256.7	28.46	352.69	0.93	11.64
1976	2,464.9	40,895.7	37.0	293.6	35.34	385.80	1.16	12.73
1977	5,651.9	46,547.6	64.6	358.2	41.65	425.01	1.37	14.02
1978	4,016.0	50,563.7	61.6	419.8	47.91	470.27	1.58	15.51
1979	5,421.1	55,984.7	122.8	542.6	53.31	520.67	1.75	17.16
1980	5,067.7	61,052.4	158.1	700.7	139.85	657.35	4.61	21.66
1981	5,255.1	66,307.5	154.4	855.0	65.52	718.78	2.15	23.68
1982	4,967.6	71,275.1	186.4	1,041.4	70.37	784.73	2.31	25.83
1983	4,634.3	75,909.3	165.0	1,206.4	61.74	841.67	2.02	27.70
1984	5,045.9	80,955.2	218.4	1,424.8	40.19	876.73	1.30	28.83
1985	5,438.2	86,393.5	242.6	1,667.4	50.93	922.56	1.65	30.31
1986	5,337.0	91,730.5	234.6	1,902.0	37.81	955.15	1.22	31.35
1987	3,147.9	94,878.3	155.7	2,057.7	37.04	986.94	1.20	32.38
1988	2,631.6	97,509.9	288.6	2,346.4	30.59	1,012.20	0.97	33.17
1989	1,698.2	99,208.1	221.0	2,567.4	20.63	1,027.47	0.65	33.65
1990	1,386.4	100,594.4	199.7	2,767.1	19.17	1,041.30	0.61	34.08
1991[c]	1,717.2	102,311.7	142.7	2,909.8	18.89	1,054.86	0.60	34.50
1992	361.4	102,673.0	52.5	2,962.3	7.69	1,057.21	0.25	34.57
1993	1,442.8	104,115.9	95.1	3,057.3	6.12	1,058.01	0.20	34.61
Remote handled								
1970	12.0	12.0	0.3	0.3	0.02	0.02	0.00	0.00
1971	15.9	27.8	0.2	0.5	0.02	0.05	0.00	0.00
1972	94.9	122.8	1.1	1.6	0.09	0.14	0.00	0.00
1973	59.8	182.5	0.3	1.9	0.03	0.17	0.00	0.01
1974	41.1	223.6	0.2	2.1	0.01	0.19	0.00	0.01
1975	125.7	349.3	0.3	2.4	0.03	0.22	0.00	0.01
1976	76.6	425.9	0.5	2.9	0.05	0.27	0.00	0.01

25

Table 3.7 (continued)

End of calendar year	Volume (m^3)		TRU mass[b] (kg)		TRU radioactivity (10^3 Ci)		TRU thermal power (10^3 W)	
	Annual	Cumulative	Annual	Cumulative	Annual	Cumulative	Annual	Cumulative
Remote handled (continued)								
1977	56.6	482.5	0.6	3.5	0.06	0.33	0.00	0.01
1978	49.4	531.9	0.5	4.0	0.04	0.37	0.00	0.01
1979	23.1	555.0	1.1	5.1	0.09	0.47	0.00	0.01
1980	27.1	582.1	0.5	5.6	0.04	0.52	0.00	0.02
1981	33.2	615.4	0.7	6.3	0.05	0.58	0.00	0.02
1982	33.1	648.4	0.4	6.7	0.03	0.62	0.00	0.02
1983	34.2	682.6	0.6	7.3	0.07	0.70	0.00	0.02
1984	20.8	703.5	0.4	7.7	0.03	0.74	0.00	0.02
1985	16.5	720.0	0.2	7.9	0.01	0.76	0.00	0.02
1986	18.8	738.8	0.2	8.0	0.01	0.78	0.00	0.02
1987	88.8	827.6	0.7	8.7	0.13	0.92	0.00	0.03
1988	5.2	832.8	0.2	8.9	0.02	0.95	0.00	0.03
1989	3.3	836.1	2.5	11.4	0.88	1.84	0.03	0.06
1990	12.0	848.1	0.1	11.5	0.08	1.91	0.00	0.06
1991	55.9	903.9	0.1	11.6	0.04	1.95	0.00	0.06
1992	435.9	1,339.9	0.1	11.7	0.03	1.97	0.00	0.06
1993	33.3	1,373.2	2.2	13.9	0.13	2.10	0.00	0.07
Total								
1970	2,189.7	2,189.7	8.5	8.5	1.74	1.74	0.06	0.06
1971	8,971.5	11,161.3	39.5	48.1	219.39	221.13	7.26	7.32
1972	7,637.3	18,798.5	40.9	89.0	49.97	269.46	1.65	8.91
1973	7,180.2	25,978.7	40.4	129.4	12.12	279.69	0.40	9.24
1974	5,788.0	31,766.7	51.8	181.2	48.80	326.60	1.61	10.79
1975	7,013.5	38,780.2	77.9	259.1	28.48	352.91	0.93	11.65
1976	2,541.5	41,321.6	37.5	296.6	35.39	386.07	1.17	12.74
1977	5,708.5	47,030.1	65.2	361.7	41.71	425.34	1.37	14.03
1978	4,065.4	51,095.6	62.0	423.8	47.96	470.65	1.58	15.52
1979	5,444.2	56,539.7	123.9	547.7	53.40	521.14	1.75	17.18
1980	5,094.8	61,634.5	158.6	706.3	139.89	657.87	4.61	21.68
1981	5,288.3	66,922.9	155.1	861.3	65.57	719.37	2.15	23.69
1982	5,000.6	71,923.5	186.8	1,048.1	70.41	785.35	2.31	25.85
1983	4,668.5	76,592.0	165.6	1,213.7	61.81	842.37	2.02	27.72

Table 3.7 (continued)

End of calendar year	Volume (m^3) Annual	Volume (m^3) Cumulative	TRU mass[b] (kg) Annual	TRU mass[b] (kg) Cumulative	TRU radioactivity (10^3 Ci) Annual	TRU radioactivity (10^3 Ci) Cumulative	TRU thermal power (10^3 W) Annual	TRU thermal power (10^3 W) Cumulative
Total (continued)								
1984	5,066.8	81,658.7	218.8	1,432.5	40.22	877.47	1.30	28.85
1985	5,454.8	87,113.5	242.8	1,675.3	50.95	923.32	1.65	30.33
1986	5,355.7	92,469.2	234.7	1,910.0	37.82	955.93	1.22	31.37
1987	3,236.7	95,705.9	156.4	2,066.4	37.17	987.86	1.21	32.41
1988	2,636.8	98,342.6	288.8	2,355.3	30.61	1,013.15	0.97	33.20
1989	1,701.5	100,044.1	223.5	2,578.8	21.51	1,029.31	0.68	33.71
1990	1,398.4	101,442.5	199.8	2,778.6	19.24	1,043.21	0.61	34.14
1991[c]	1,773.1	103,215.6	142.8	2,921.4	18.93	1,056.80	0.60	34.57
1992	797.3	104,012.9	52.5	2,973.9	7.72	1,059.18	0.25	34.64
1993	1,476.1	105,489.0	97.2	3,071.2	6.25	1,060.11	0.20	34.68

[a]Radioactive daughters of TRU radionuclides are not included.
[b]TRU mass means mass of TRU radionuclides, not of total waste.
[c]SRS CH waste data not available for individual years prior to 1991 but is included in totals for years 1991 and 1992.

Table 3.8. Summary of buried TRUW by sites: cumulative as-stored volumes

Site name	Site acronym	Cumulative volume at end of calendar year, m^3									
		1945	1950	1955	1960	1965	1970	1975	1980	1985	1993
Argonne National Laboratory–East	ANL–E	0	0	0	0	0	0	0	0	0	0
Energy Technology Engineering Center	ETEC	0	0	0	0	0	0	0	0	0	0
Hanford Site	HANF	779	6,159	16,333	35,509	47,932	63,624	63,629	63,629	63,629	63,629[a]
Idaho National Engineering Laboratory	INEL	0	0	1,789	10,539	26,299	57,119	57,119	57,119	57,119	57,119
Knolls Atomic Power Laboratory	KAPL	0	0	0	0	0	0	0	0	0	0
Lawrence Berkeley Laboratory	LBL	0	0	0	0	0	0	0	0	0	0
Lawrence Livermore National Laboratory	LLNL	0	0	0	0	0	0	0	0	0	0
Los Alamos National Laboratory	LANL	0	0	0	0	0	0	0	0	0	0
Mound	MOUND	0	0	0	0	0	0	0	0	0	0
Nevada Test Site	NTS	0	0	0	0	0	0	0	0	0	0
Oak Ridge National Laboratory	ORNL	0	0	c	c	c	41	176	176	176	176
Paducah Gaseous Diffusion Plant	PAD	0	0	0	0	0	0	0	0	0	0
Rocky Flats Plant	RFP	0	0	0	0	0	0	0	0	0	0
Sandia National Laboratory/ New Mexico	SNL/NM	0	0	0	0.14	0.85	1.33	1.33	1.33	1.33	1.33
Savannah River Site	SRS	b	b	b	b	b	b	4,874	4,874	4,874	4,874
West Valley Demonstration Project	WVDP	0	0	0	0	0	709	1,353	1,353	1,353	1,353
Total[d]		779	6,159	18,122	46,048	74,232	121,494	127,152	127,152	127,152	127,152

[a]Reference 4 states that upon retrieval of this waste, a significant amount of the soil will become contaminated and will increase the volume of waste. The estimated waste and associated contaminated soil volume is 109,000 m^3. Quantities shown for Hanford are based on their submittal of Aug. 30, 1993.

[b]No year-by-year breakdown available for these years. SRS shows 4,874 m^3 as the total volume buried from 1952 through 1974.

[c]Unknown amounts were buried prior to 1970 and are not included in totals.

[d]Totals do not include approximately 9,500 m^3 of TRUW injected by hydrofracture at ORNL. This was included in last year's totals.

001223

Table 3.9. Summary of buried TRUW by sites: cumulative as-stored radioactivity (all radionuclides)

Site name	Site acronym	Cumulative as-stored radioactivity at end of calendar year, 10³ Ci									
		1945	1950	1955	1960	1965	1970	1975	1980	1985	1993
Argonne National Laboratory–East	ANL–E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy Technology Engineering Laboratory	ETEC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hanford Site[a]	HANF	0.56	13.89	170.14	231.13	242.85	601.02	601.67	601.68	601.68	601.68
Idaho National Engineering Laboratory	INEL	0.00	0.00	b	11.20	58.33	248.83	248.83	248.83	248.83	248.83
Knolls Atomic Power Laboratory	KAPL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Berkeley Laboratory	LBL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Livermore National Laboratory	LLNL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Los Alamos National Laboratory	LANL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mound	MOUND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada Test Site	NTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oak Ridge National Laboratory	ORNL	0.00	0.00	0.00	0.00	0.00	0.01	0.24	0.24	0.24	0.24
Paducah Gaseous Diffusion Plant	PAD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rocky Flats Plant	RFP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sandia National Laboratory/New Mexico	SNL/NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Savannah River Site	SRS	c	c	c	c	c	c	33.67	33.67	33.67	33.67
West Valley Demonstration Project	WVDP	0.00	0.00	0.00	0.00	0.00	438.00	652.00	652.00	652.00	652.00
Total[d]		0.56	13.89	170.14	242.33	301.18	1,287.86	1,536.41	1,536.42	1,536.42	1,536.42

[a]Data for HANF are based on their submittal of Aug. 30, 1993 (Rev. 9 IDB data).

[b]Unknown.

[c]SRS data submittal showed 33,670 Ci of TRU radionuclides buried from 1952 through 1974. The curies of fission products and other non-TRU radionuclides associated with this waste were listed as unknown.

[d]Does not include about 680,000 Ci deposited by hydrofracture at ORNL. Last year's table included this material.

29

Table 3.10. Summary of buried TRUW by sites: cumulative as-stored radioactivity (TRU radionuclides only)

Site name	Site acronym	Cumulative as-stored radioactivity at end of calendar year, 10^3 Ci									
		1945	1950	1955	1960	1965	1970	1975	1980	1985	1993
Argonne National Laboratory–East	ANL–E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy Technology Engineering Laboratory	ETEC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hanford Site	HANF	0.10	2.37	103.41	110.90	112.64	114.45	114.45	114.45	114.45	114.45
Idaho National Engineering Laboratory	INEL	a	a	a	a	a	a	a	a	a	a
Knolls Atomic Power Laboratory	KAPL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Berkeley Laboratory	LBL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Livermore National Laboratory	LLNL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Los Alamos National Laboratory	LANL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mound	MOUND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada Test Site	NTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oak Ridge National Laboratory	ORNL[b]	0.00	0.00	0.00	0.00	0.00	0.01	0.10	0.10	0.10	0.10
Paducah Gaseous Diffusion Plant	PAD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rocky Flats Plant	RFP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sandia National Laboratory/ New Mexico	SNL/NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Savannah River Site	SRS	c	c	c	c	c	c	33.67	33.67	33.67	33.67
West Valley Demonstration Project	WVDP	0.00	0.00	0.00	0.00	0.00	438.00	652.00	652.00	652.00	652.00
Total		0.10	2.37	103.41	110.90	112.64	114.46	148.22	148.22	148.22	148.22

[a]INEL did not give isotopic compositions, so radioactivity for TRU radionuclides cannot be determined. See Table 3.9 for data on a total radioactivity basis.

[b]Quantities shown for ORNL include ^{244}Cm, which is considered a TRU radionuclide at ORNL. If ^{244}Cm is omitted, the totals are reduced by 0.08 10^3 Ci/year.

[c]SRS did not give data on a year-by-year basis. Cumulative curies from 1952 through 1974 were given for TRU radionuclides only.

001225

Table 3.11. Summary of buried TRUW by sites: decayed radioactivity (all radionuclides)

Site name	Site acronym	Cumulative radioactivity at end of calendar year, 10^3 Ci									
		1945	1950	1955	1960	1965	1970	1975	1980	1985	1993
Argonne National Laboratory–East	ANL–E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy Technology Engineering Laboratory	ETEC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hanford Site	HANF	0.56	13.40	161.70	189.75	177.37	452.07	308.59	256.77	218.37	173.41
Idaho National Engineering Laboratory	INEL	a	a	a	a	a	a	a	a	a	a
Knolls Atomic Power Laboratory	KAPL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Berkeley Laboratory	LBL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Livermore National Laboratory	LLNL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Los Alamos National Laboratory	LANL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mound	MOUND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada Test Site	NTS	0.00	0.00	0.00	0.00	0.00	0.01	23.22	20.67	660.96	543.20
Oak Ridge National Laboratory	ORNL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paducah Gaseous Diffusion Plant	PAD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rocky Flats Plant	RFP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sandia National Laboratory/ New Mexico	SNL/NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Savannah River Site	SRS	b	b	b	b	b	b	33.67	32.60	31.70	30.50
West Valley Demonstration Project	WVDP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		0.56	13.40	161.70	189.75	177.37	452.08	365.48	310.04	911.03	747.11

[a]INEL data did not include any isotopic compositions, so no decay calculations could be made.

[b]SRS gave cumulative radioactivity as of 1974 on an as-stored basis for TRU radionuclides only. The reduction in activity shown from 1975 through 1993 is essentially all due to the decay of ^{238}Pu.

31

Table 3.12. Summary of buried TRUW by sites: decayed radioactivity (TRU radionuclides only)

Site name	Site acronym	Cumulative radioactivity at end of calendar year, 10^3 Ci									
		1945	1950	1955	1960	1965	1970	1975	1980	1985	1993
Argonne National Laboratory–East	ANL–E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy Technology Engineering Laboratory	ETEC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hanford Site	HANF	0.10	2.38	102.95	107.53	106.50	105.61	102.95	100.32	97.72	93.80
Idaho National Engineering Laboratory	INEL	a	a	a	a	a	a	a	a	a	a
Knolls Atomic Power Laboratory	KAPL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Berkeley Laboratory	LBL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lawrence Livermore National Laboratory	LLNL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Los Alamos National Laboratory	LANL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mound	MOUND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada Test Site	NTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oak Ridge National Laboratory	ORNL	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.02
Paducah Gaseous Diffusion Plant	PAD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rocky Flats Plant	RFP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sandia National Laboratory/New Mexico	SNL/NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Savannah River Site	SRS	b	b	b	b	b	b	33.67	32.60	31.70	30.50
West Valley Demonstration Project	WVDP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		0.10	2.38	102.95	107.53	106.50	105.61	136.64	132.94	129.44	124.32

[a]No data available.

[b]SRS gave radioactivity data on a cumulative basis as of 1974. Data after 1974 are the same as in Table 3.11 because SRS gave radioactivity of buried waste for TRU radionuclides only.

Table 3.13. Volumes and radioactivities of TRU-contaminated soil

Site	Soil contaminated with solid TRUW		Soil contaminated with liquid TRUW	
	Volume (m^3)	Radioactivity (Ci)	Volume (m^3)	Radioactivity (Ci)
ANL-E	0	0	0	0
ETEC	0	0	0	0
HANF	a	a	32,000	80,591
INEL	b	b	b	b
KAPL	0	0	0	0
LANL	c	d	c	d
LBL	0	0	0	0
LLNL	0	0	0	0
MOUND	c	c	c	c
NTS	c	c	b	b
ORNL	c	c	c	c
PAD	b	b	b	b
RFP	2	40	b	b
SNL/NM	c	c	c	c
SRS	0	0	0	0
WVDP	e	e	e	e

[a]Included in buried TRUW.
[b]Listed in submittal as N/A (not applicable).
[c]Unknown.
[d]Partial data submitted.
[e]No data submitted.

001227

Table 3.14. Mixed TRUW volumes[a]

Site	Category	Mixed CH TRU volume, m³			Mixed RH TRU volume, m³		
		1970–1986	1987–1993	1994	1970–1986	1987–1993	1994
AMES	Mixed	0	0	0	0	0	0
	Suspect mixed	0	0	0.3	0	0	0
ANL–E	Mixed	b		0	b		0
	Suspect mixed	b		0	b		0
BAPL[c]							
ETEC	Mixed	0	0.2	0	0	0	0
	Suspect mixed	0	0	0	0	0	0
HANF	Mixed	0	170.6	5.9	0	1.4	27.1
	Suspect mixed	193	0	0	4.46	0	0
INEL	Mixed	36,400	2,420	0	29.9	17.5	0
	Suspect mixed	0	0	0	0	7.4	0
KAPL[d]							
LANL[e]	Mixed	0	619.1	225	0	0	10
	Suspect mixed	6,796.3	0	0	2.10	0	0
LBL[f]							
LLNL	Mixed	b	7.93	0.62	0	0	0
	Suspect mixed	b	0	0	0	0	0
MOUND[e]	Mixed	0	1,020	0			
	Suspect mixed						
MURR	Mixed	0	0.06	0.02	0	0	0
NTS	Mixed	570	1.9	0	5.3	0	0
	Suspect mixed						
ORNL	Mixed	176	6.8	62.5	231	26.2	8.3
	Suspect mixed	752	110	d	225	9.8	0
PAD[e]	Mixed	4.34	g	g	g	g	g
	Suspect mixed						
RFP[h]	Mixed	110	773	23	g	g	g
	Suspect mixed	b	g	g	g	g	g
SNL/NM[i]	Mixed	b	0	0	0	0	0
	Suspect mixed	0	0	0	0	0	0
SRS	Mixed	0	166.9	55.1	b	b	0
	Suspect mixed	4,805	1,440	0	b	b	0

34

Table 3.14 (continued)

Site	Category	Mixed CH TRU volume, m^3			Mixed RH TRU volume, m^3		
		1970–1986	1987–1993	1994	1970–1986	1987–1993	1994
WVDP	Mixed	2.08	0	0	0	0	0
	Suspect mixed	9.78	20.0	b	10.5	0	0

[a]Compiled from Table 4 of site submittals. The quantities shown in each column represent the total volume of a given waste type generated during the period indicated at the top of the column.

[b]Unknown.

[c]No data submitted for this table.

[d]KAPL estimated their TRUW contains about 10% LLW and 5% mixed waste.

[e]Data are from previous submittal for Rev. 9 IDB report.

[f]LBL reports that they do not generate or store TRU mixed waste.

[g]Not applicable.

[h]There is no remote-handled TRUW at RFP.

[i]SNL/NM appended the following notes to their Table 4 submittal:

1. Includes only TRU waste included in SNL/NM's Disposal Request process.
2. With regard to instruction footnote c of Table 4: TRU material, which may be mixed and may be remote-handled material, is in storage in Technical Area V (TA-V) and the Manzano Site Structures. The years the material was generated or placed in storage is unknown. The material in TA-V is approximately 1 m^3 and is listed in the 180-day report, although it may not be categorized as waste under SNL/NM policy current at the time of this report. A recent inventory found two 55-gal containers of TRU material in the Manzanos, one contact-handled and one remote-handled. The material may be mixed and also may not yet be officially categorized as waste. None of this Manzano material was included in TRU estimates for the 180-day report. There is no activity information for the material at TA-V or the Manzanos. The TRU material at TA-V and the Manzanos has not been entered into the Disposal Request process. To be consistent with SNL/NM's approach for input into this report, no material that has not been entered into the Disposal Request process is included in the values listed in Table 4, "Mixed TRU waste and non-mixed TRU waste volumes (m^3)."
3. The estimated waste generation for 1993 for environmental restoration waste containing TRU contaminated with RCRA constituents was estimated in Table 2-4, "Projection of mixed waste to be generated by DOE environmental restoration activities (in cubic meters)," Volume 1: *U.S. Department of Energy Interim Mixed Waste Inventory Report: Waste Streams, Treatment Capacities, and Technologies*, DOE/NBM-1100, April 1993, as being 1 m^3. A more recent estimate puts 1993 CH TRU mixed (RCRA) environmental restoration waste generation at zero. (See Table 5, "Future generated TRU solid waste volumes—average annual.") The amount of TRU mixed operational or D&D waste in 1993 is unknown. Therefore, the volume of CH TRU waste contaminated with RCRA constituents in 1993 is unknown.
4. The amount of contact-handled non-mixed TRU waste to be generated by Dec. 31, 1993, is unknown.
5. An unknown amount of remote-handled non-mixed TRU waste has been generated in 1993 to date and it is not known what additional amounts will be generated by Dec. 31, 1993.

001229

Table 3.15. Projected future TRUW volumes generated annually[a]

Site	Waste type	Projected volumes generated, m^3/year						
		1994	1995–1996	1997–2000	2001–2005	2006–2010	2011–2015	2016–2020
AMES	CH	0.03	0.03	b	b	b	b	b
	RH	0	0	0	0	0	0	0
ANL-E	CH	12.8	12.8	5.9	5.9	5.9	5.9	5.9
	RH	1.7	1.7	1.7	1.7	1.7	1.7	1.7
BAPL	CH	0	13.3	18.1	4.9	0	0	0
	RH	0	0.26	0.18	0.06	0	0	0
ETEC	CH	0	5.2	0	0	0	0	0
	RH	0	0	0	0	0	0	0
HANF[c]	CH	169	484	224	1,182	1,417	1,417	1,417
	RH	29	161	149	1,394	2,221	2,221	2,221
INEL	CH	0	0	0	0	0	0	0
	RH	6	6	6	6	6	6	6
KAPL	CH	d	d	d	d	d	d	d
	RH	0.6	0.6	0.8	1.0	1.0	1.0	1.0
LANL	CH	425	425	550	550	550	550	550
	RH	20	10	10	10	10	10	10
LBL	CH	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	RH	0	0	0	0	0	0	0
LLNL	CH	24.6	93	93	93	93	93	93
	RH	0	0	0	0	0	0	0
MOUND	CH	d	d	d	d	d	d	d
	RH	d	d	d	d	d	d	d
NTS	CH	b	b	b	b	b	b	b
	RH	b	b	b	b	b	b	b
ORNL	CH	63.5	55	20.3	20	20	20	20
	RH	8.3	25	25	20	12.4	12.4	12
PAD	CH	d	d	d	d	d	d	d
	RH	d	d	d	d	d	d	d
RFP	CH	58.2	112.2	27.2	68.8	215	212	179
	RH	e	e	e	e	e	e	e
SNL/NM	CH	0	6	1	1	1	1	1
	RH	e	e	e	e	e	e	e
SRS[f]	CH	636	719	2,057	2,572	2,572	2,572	2,572
	RH	2.6	2.6	5.1	6.4	6.4	6.4	6.4

36

Table 3.15 (continued)

Site	Waste type	Projected volumes generated, m³/year						
		1994	1995–1996	1997–2000	2001–2005	2006–2010	2011–2015	2016–2020
WVDP	CH	b	b	b	b	b	b	b
	RH	b	b	b	b	b	b	b

[a]Compiled from Table 5 of site submittals.
[b]Unknown.
[c]Quantities are based on Hanford submittal to WIPP Baseline Inventory Report.
[d]No estimates given.
[e]No RH waste at this site.
[f]D&D and remedial action waste unknown in all periods.

001231

37

APPENDIX J

WEST VALLEY DEMONSTRATION PROJECT (WVDP) WASTE STREAM PROFILES

The following modifications were made by the WTWBIR team in developing the WVDP waste stream profiles:

- WVDP Final Waste Form Groups were modified to be consistent with the nomenclature used in the WTWBID. These changes included word and spelling changes. The assigned Final Waste Form Groups are consistent with the information provided by WVDP.
- The number of containers were corrected based on the volumes reported by WVDP.
- The volumes for the year 1993 were changed from an annual rate of generation (m^3/year) to a cumulative value (m^3).
- Total volumes were reported for the years 1998-2002 and 2003-2022. These were changed to volume per year.
- WVDP reported the projected volumes of some waste streams as "unknown" (UNK). Since numeric values are required in these fields, these entries were replaced with zeros.
- For the waste stream WV-T016, the SWB containers reported by the site were replaced by RH canisters.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE WV

WASTE STREAM MWIR ID		**STREAM NAME**	TRU Filters
WIPP ID	WV-M005	**DESCRIPTION**	Filters generated from normal site operations.
Local ID	N/A		
MATRIX CODE	5410		
SITE FINAL FORM IDC	WV-LAG.1*		

Waste Matrix Code Group: Filter

Site Matrix Description: This waste stream consists of filters generated from normal site operations. The specific contents include pre-filters, High Efficiency Particulate Air (HEPA) filters, and roughing filters.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste	X	Suspect Mixed TRU	X	Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE WV

WV-M005 CONTAINER: WVDP Standard Waste Box | Type/Size: 60 ft3

Container Mat'l: Carbon steel | Int. Vol/Ctnr: 1.7 m3

Liner Type: none | Liner Material:

Number Stored: | Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	19.0	19.0	m3
End of 1993:	19.0	19.0	m3
1994:	43.6	43.6	m3/yr
1995:	23.8	23.8	m3/yr
1996:	0.8	0.8	m3/yr
1997:	0.8	0.8	m3/ry
1998-2002:	12.5	12.5	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Cs137		Curies/m3
Ba137m		Curies/m3
Sr90		Curies/m3
Y90		Curies/m3
Pu(unspec)		Curies/m3
Am241		Curies/m3
U(unspec)		Curies/m3

Comments

'This waste stream represents 2-90ft3 and 7-70ft3 boxes currently stored in the Lag Storage Building.

As a result of the development of the Historical Waste Report (HWR) in support of the Federal and State Facility Compliance Agreement (FSFCA), these wastes were identified as radiologically contaminated but require further evaluation to perform a complete hazardous characterization.

The typical waste material weights (kg/m3) are not available for this waste stream.

Typical activity (curies/m3) is unknown for these radionuclides.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV

WASTE TYPE MTRU HANDLING CH GENERATOR SITE WV

WASTE STREAM MWIR ID		**STREAM NAME**	TRU General Waste (Unclassified)
WIPP ID	WV-M007		
Local ID	N/A	**DESCRIPTION**	General site waste requiring hazardous characterization generated from normal site operations.
MATRIX CODE	8900		
SITE FINAL FORM IDC	WV-LAG.3*		
Waste Matrix Code Group	Unknown		
Site Matrix Description	This waste stream consists of unclassified (i.e., requires hazardous characterization) general site waste generated from normal site operations. The specific contents of this waste stream are unknown.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	[ ]	Mixed TRU	[ ]	Rsearch and Devel. Waste	[ ]	TSCA Asbestos	[ ]
Non-Defense TRU Waste	[ ]	Non-Mixed TRU	[ ]	Operations Waste	[X]	PCBs	[ ]
Commercial TRU Waste	[X]	Suspect Mixed TRU	[X]	Residues	[ ]	Other	[ ]
Unknown	[ ]	Unknown	[ ]	Decon and Decommissioning	[ ]	N/A	[X]
				Environmental Restoration	[ ]	Unknown	[ ]
				From Treatment of Waste	[ ]		
				Maintenance	[ ]		

1237

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WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **WV** WASTE TYPE MTRU HANDLING CH GENERATOR SITE WV

WV-M007 CONTAINER: Drum | Type/Size: 55-gallon

Container Matl: Carbon steel | Int. Vol/Ctnr: 0.208 m3

Liner Type: none | Liner Material:

Number Stored: 48 | Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	10.0	10.0	m3
End of 1993:	10.0	10.0	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Cs137		Curies/m3
Ba137M		Curies/m3
Sr90		Curies/m3
Y90		Curies/m3
Pu(unspec)		Curies/m3
Am241		Curies/m3
U(unspec)		Curies/m3

Comments

'This waste stream represents 48 55-gallon drums currently stored in the Lag Storage Building.

As a result of the development of the Historical Waste Report (HWR) in support of the Federal and State Facility Compliance Agreement (FSFCA), these wastes were identified as radiologically contaminated but require further evaluation to perform a complete hazardous characterization.

The typical waste material weights (kg/m3) are not available for this waste stream.

Typical activity (curies/m3) is unknown for these radionuclides.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE WV

WASTE STREAM MWIR ID		**STREAM NAME**	TRU Concrete
WIPP ID	WV-M008		
Local ID	N/A	**DESCRIPTION**	Concrete samples generated from the on-site Analytical & Process Chemistry (A&PC) laboratory.
MATRIX CODE	3150		
SITE FINAL FORM IDC	WV-LAG.4*		
Waste Matrix Code Group	*Solidified Inorganics*		
Site Matrix Description	This waste stream consists of samples solidified with cement generated from the on-site A&PC laboratory.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT | **TRUCON CODE**

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste	X	Suspect Mixed TRU	X	Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **WV** WASTE TYPE MTRU HANDLING CH GENERATOR SITE WV

WV-M008

CONTAINER:	Drum	Container Matl:	Carbon steel	Liner Type:	none	Number Stored:	1
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:		Number Projected:	0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.2	m3
End of 1993:	0.2	0.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Cs137		Curies/m3
Ba137m		Curies/m3
Sr90		Curies/m3
Y90		Curies/m3
Pu(unspec)		Curies/m3
Am241		Curies/m3
U(unspec)		Curies/m3

Comments

*This waste stream represents 1 55-gallon drum currently stored in the Lag Storage Building.

As a result of the development of the Historical Waste Report (HRW) in support of the Federal and State Facility Compliance Agreement (FSFCA), these wastes were identified as radiologically contaminated but require further evaluation to perform a complete hazardous characterization.

The typical waste material weights (kg/m3) are not available for this waste stream.

Typical activity (curies/m3) is unknown for these radionuclides.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV | **WASTE TYPE** MTRU | **HANDLING** CH | **GENERATOR SITE** WV

WASTE STREAM

MWIR ID:
WIPP ID: WV-M010
Local ID: N/A

MATRIX CODE 3190
SITE FINAL FORM IDC WV-LAG.6*

STREAM NAME TRU Spent Absorbents

DESCRIPTION Spent absorbents generated from site operations.

Waste Matrix Code Group Solidified Inorganics

Site Matrix Description *This waste stream consists of spent absorbents generated from site operations. The media absorbed is not known for this waste stream.*

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste	X		PCBs	
Commercial TRU Waste	X	Suspect Mixed TRU	X	Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME **WV** | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE WV

WV-M010

CONTAINER:	Drum	Container Matl:	Carbon steel	Liner Type:	none
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	
Number Stored:	2	Number Projected:	0		

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.4	m3
End of 1993:	0.4	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Cs137		Curies/m3
Ba137m		Curies/m3
Sr90		Curies/m3
Y90		Curies/m3
Pu(unspec)		Curies/m3
Am241		Curies/m3
U(unspec)		Curies/m3

Comments

*This waste stream represents 2 55-gallon drums currently stored in the Lag Storage Building.

As a result of the development of the Historical Waste Report (HWR) in support of the Federal and State Facility Compliance Agreement (FSFCA), these wastes were identified as radiologically contaminated but require further evaluation to perform a complete hazardous characterization.

The typical waste material weights (kg/m3) are not available for this waste stream.

Typical activity (curies/m3) is unknown for these radionuclides.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV   WASTE TYPE MTRU   HANDLING CH   GENERATOR SITE WV

WASTE STREAM

MWIR ID	
WIPP ID	WV-M012
Local ID	N/A
MATRIX CODE	8900
SITE FINAL FORM IDC	WV-LAG.8*
Waste Matrix Code Group	Unknown

STREAM NAME TRU Glove Boxes (Unclassified)

DESCRIPTION Glove boxes and general waste requiring hazardous evaluation generated from previous decomissioning and decontamination activities and normal site operations.

Site Matrix Description This waste stream consists of a glove box and general waste generated from the laboratory on-site as a result of previous decommissioning and decontamination activities and normal site operations. The specific contents represented hy the "general waste" are not known. This radiologically contaminated waste stream requires further evaluation to complete the hazardous characterization.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste			PCBs	
Commercial TRU Waste	X	Suspect Mixed TRU	X	Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV

WASTE TYPE MTRU HANDLING CH GENERATOR SITE WV

WV-M012 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Carbon steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: none
Liner Material:

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.2	m3
End of 1993:	0.2	0.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Cs137		Curies/m3
Ba137m		Curies/m3
Sr90		Curies/m3
Y90		Curies/m3
Pu(unspec)		Curies/m3
Am241		Curies/m3
U(unspec)		Curies/m3

Comments

*This waste stream represents 1 55-gallon drum currently stored in the Lag Storage Building.

As a result of the development of the Historical Waste Report (HWR) in support of the Federal and State Facility Compliance Agreement (FSFCA), these wastes were identified as radiologically contaminated but require further evaluation to perform a complete hazardous characterization.

The typical waste material weights (kg/m3) are not available for this waste stream.

Typical activity (curies/m3) is unknown for these radionuclides.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV

WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE WV

WASTE STREAM MWIR ID		**STREAM NAME**	*TRU Sweeping Compound*
WIPP ID	WV-M013		
Local ID	N/A	**DESCRIPTION**	Grid and floor debris generated from normal site operations.
MATRIX CODE	3190		
SITE FINAL FORM IDC	WV-LAG.9'		
Waste Matrix Code Group	Solidified Inorganics		
Site Matrix Description	This waste stream consists of sweeping compound generated from normal site operations. The specific contents include grid and floor debris. This waste stream is classified as hazardous/radioactively contaminated based on the assumption that the waste contains lead and chromium contaminated paint chips.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste	[ ]	Mixed TRU	[X]	Rsearch and Devel. Waste	[ ]	TSCA Asbestos	[ ]
Non-Defense TRU Waste	[ ]	Non-Mixed TRU	[ ]	Operations Waste	[X]	PCBs	[ ]
Commercial TRU Waste	[X]	Suspect Mixed TRU	[ ]	Residues	[ ]	Other	[ ]
Unknown	[ ]	Unknown	[ ]	Decon and Decommissioning	[ ]	N/A	[X]
				Environmental Restoration	[ ]	Unknown	[ ]
				From Treatment of Waste	[ ]		
				Maintenance	[ ]		

0012246

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE WV

WV-M013

CONTAINER:	Drum	Container Matl:	Carbon steel	Liner Type:	none
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	

Number Stored: 7
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	1.5	1.5	m3
End of 1993:	1.5	1.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Cs137		Curies/m3
Ba137m		Curies/m3
Sr90		Curies/m3
Y90		Curies/m3
Pu(unspec)		Curies/m3
Am241		Curies/m3
U(unspec)		Curies/m3

Comments

*This waste stream represents 7 55-gallon drums currently stored in the Lag Storage Building.

The typical waste material weights (kg/m3) are not available for this waste stream.

Typical activity (curies/m3) is unknown for these radionuclides.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV

WASTE TYPE MTRU **HANDLING** RH **GENERATOR SITE** WV

WASTE STREAM MWIR ID	
WIPP ID	WV-M015
Local ID	N/A
MATRIX CODE	8900
SITE FINAL FORM IDC	WV-CPC.2*
STREAM NAME	Chemical Process Cell General Waste
DESCRIPTION	General waste generated from the Chemical Process Cell.
Waste Matrix Code Group	Unknown
Site Matrix Description	This waste stream was generated as a result of the decommissioning and decontamination of the Chemical Process Cell (CPC). The CPC was previously used to reprocess spent fuel rods. The specific contents of this container are not known.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste			PCBs	
Commercial TRU Waste	X	Suspect Mixed TRU	X	Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

4717

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV **WASTE TYPE** MTRU **HANDLING** RH **GENERATOR SITE** WV

WV-M015 **CONTAINER:** RH Cannister **Type/Size:** **Container Matl:** Steel **Int. Vol/Ctnr:** 0.89 m3 **Liner Type:** **Liner Material:** **Number Stored:** **Number Projected:**

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	435.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	10.5	10.5	m3
End of 1993:	10.5	10.5	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Cs137		Curies/m3
Ba137m		Curies/m3
Sr90		Curies/m3
Y90		Curies/m3
Pu(unspec)		Curies/m3
Am241		Curies/m3
U(unspec)		Curies/m3

Comments

*This waste stream represents 1 370.3ft3 box currently stored in the Chemical Process Cell - Waste Stream Area.

As a result of the development of the Historical Waste Report (HWR) in support of the Federal and State Facility Compliance Agreement (FSFCA), these wastes were identified as radiologically contaminated but require further evaluation to perform a complete hazardous characterization.

The typical waste material weights (kg/m3) are not available for this waste stream.

Typical activity (curies/m3) is unknown for these radionuclides.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE WV

WASTE STREAM

MWIR ID	
WIPP ID	WV-T001
Local ID	N/A
MATRIX CODE	5490
SITE FINAL FORM IDC	WV-RER.1'
Waste Matrix Code Group	Heterogeneous
STREAM NAME	Fissile Material - Solids
DESCRIPTION	Solid fissile material generated from previous decontamination and decommissioning activities.
Site Matrix Description	This waste stream consists of solid fissile material generated from previous decontamination and decommissioning activities. The specific contents include CUNO filters, vacuum cans, glove box debris, etc.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste	X	Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

0501250

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE WV

WV-T001

CONTAINER:	Drum	Container Matl:	Carbon steel	Liner Type:	none
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	

Number Stored: 18
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	3.7	3.7	m3
End of 1993:	3.7	3.7	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
U235	0.00E+00	Curies/m3
Pu239	0.00E+00	Curies/m3
U(unspec)	0.00E+00	Curies/m3
Pu(unspec)	0.00E+00	Curies/m3

Comments

*This waste stream represents 18 55-gallon drums currently stored in the Ram Equipment Room

The typical waste material weights (kg/m3) are not available for this waste stream.

Typical activity (curies/m3) is unknown for these radionuclides.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE WV

WASTE STREAM MWIR ID	
WIPP ID	WV-T002
Local ID	N/A
MATRIX CODE	6900
SITE FINAL FORM IDC	WV-RER.2*
STREAM NAME	Fissile Material - Alpha Lab Liquids
DESCRIPTION	Liquid waste stream with associated fissile material generated from previous decontamination and decommissioning activities.
Waste Matrix Code Group	Unknown
Site Matrix Description	This waste stream consists of liquid waste stream with associated fissile material generated from previous decontamination and decommissioning activities. The specific contents include Alpha laboratory liquids.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste	X	Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

0001252

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE WV

WV-T002

CONTAINER:	Drum	Container Mat'l:	Carbon steel	Liner Type:	none
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	

Number Stored: 3
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE-ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.6	0.6	m3
End of 1993:	0.6	0.6	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
U235		Curies/m3
Pu239		Curies/m3
U(unspec)		Curies/m3
Pu(unspec)		Curies/m3

Comments

*This waste stream represents 3 55-gallon drums currently stored in the Ram Equipment Room.

The typical waste material weights (kg/m3) are not available for this waste stream.

Typical activity (curies/m3) is unknown for these radionuclides.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV

WASTE TYPE TRU HANDLING CH GENERATOR SITE WV

WASTE STREAM

MWIR ID	
WIPP ID	WV-T003
Local ID	N/A
MATRIX CODE	1130
SITE FINAL FORM IDC	WV-RER.3*
STREAM NAME	Fissile Material-UNH Solution
DESCRIPTION	Liquid waste stream with associated fissile material generated from previous decontamination and decommissioning activities.
Waste Matrix Code Group	Solidified Inorganics
Site Matrix Description	This waste Stream consists of liquid waste stream with associated fissile material generated from previous decontamination and decommissioning activities. The specific contents include Uranyl Nitrate Hexahydrate (UNH) solution.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste	X	Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV   WASTE TYPE TRU   HANDLING CH   GENERATOR SITE WV

1254

WV-T003

CONTAINER:	Drum	Container Matl:	Carbon steel	Liner Type:	none
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.2	m3
End of 1993:	0.2	0.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
U235		Curies/m3
Pu239		Curies/m3
U(unspec)		Curies/m3
Pu(unspec)		Curies/m3

Comments

*This waste stream represents 1 55-gallon drum currently stored in the Ram Equipment Room.

The typical waste material weights (kg/m3) are not available for this waste stream.

Typical activity (curies/m3) is unknown for these radionuclides.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE WV

WASTE STREAM MWIR ID	
WIPP ID	WV-T004
Local ID	N/A
MATRIX CODE	8900
SITE FINAL FORM IDC	WV-RER.4*
Waste Matrix Code Group	Unknown
STREAM NAME	Fissile Material - Other
DESCRIPTION	Fissile material generated from previous decontamination and decommissioning activities.
Site Matrix Description	This waste stream consists of liquid waste with associated fissile material generated from previous decontamination and decommissioning activities. The specific contents are unknown.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste	X	Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

0012256

SITE NAME WV | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE WV

WV-T004

CONTAINER:	Drum	Container Matl:	Carbon Steel	Liner Type:	nine	Number Stored:	2
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:		Number Projected:	0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.4	m3
End of 1993:	0.4	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
U235		Curies/m3
Pu239		Curies/m3
U(unspec)		Curies/m3
Pu(unspec)		Curies/m3

Comments

*This waste stream represents 2 55-gallon drums currently stored in the Ram Equipment Room.

The typical waste material weights (kg/m3) are not available for this waste stream.

Typical activity (curies/m3) is unknown for these radionuclides.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV

WASTE TYPE TRU | HANDLING CH | GENERATOR SITE WV

WASTE STREAM MWIR ID	
WIPP ID	WV-T006
Local ID	N/A
MATRIX CODE	5490
SITE FINAL FORM IDC	WV-LAG.2*
STREAM NAME	TRU General Waste (Classified)
DESCRIPTION	Radiologically and hazardous classified general site waste generated from normal site operation.
Waste Matrix Code Group	Heterogeneous
Site Matrix Description	This waste stream consists of classified (i.e., radiologically and hazardous) general site waste generated from normal site operations. The specific contents include but are not limited to anticontamination clothing, hoses, glove bags, and tools.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste	X	Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

0012558

SITE NAME WV | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE WV

WV-T006

CONTAINER: Drum
Type/Size: 55-gallon
Container Matl: Carbon steel
Int. Vol/Ctnr: 0.208 m3
Liner Type: none
Liner Material:
Number Stored: 50
Number Projected: 192

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	10.4	10.4	m3
End of 1993:	10.4	10.4	m3
1994:	8.4	8.4	m3/yr
1995:	3.9	3.9	m3/yr
1996:	3.9	3.9	m3/yr
1997:	3.9	3.9	m3/ry
1998-2002:	3.9	3.9	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Cs137		Curies/m3
Ba137m		Curies/m3
Sr90		Curies/m3
Y90		Curies/m3
Pu(unspec)		Curies/m3
Am241		Curies/m3
U(unspec)		Curies/m3

Comments

*This waste stream represents 50 55-gallon drums currently stored in the Lag Storage Building.

The typical waste material weights (kg/m3) are not available for this waste stream.

Typical activity (curies/m3) is unknown for these radionuclides.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV | **WASTE TYPE** TRU | **HANDLING** CH | **GENERATOR SITE** WV

WASTE STREAM
MWIR ID:
WIPP ID: WV-T009
Local ID: N/A.

MATRIX CODE: 5490
SITE FINAL FORM IDC: WV-LAG.5*

STREAM NAME: TRU General Laboratory Waste

DESCRIPTION: General laboratory waste generated on-site.

Waste Matrix Code Group: Heterogeneous

Site Matrix Description: This waste stream consists of general laboratory waste generated on-site. The specific contents include anticontamination clothing, bags, wipes, samples, etc.

NO MIGRATION VARIANCE PETITION ASSIGNMENT:

TRUCON CODE:

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X		PCBs	
Commercial TRU Waste	X	Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning			N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

092L03

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE WV

WV-T009

CONTAINER:	Drum	Container Matl:	Carbon steel	Liner Type:	none
Type/Size:	55-gallon	Int. Vol/Ctnr:	0.208 m3	Liner Material:	

Number Stored: 3
Number Projected: 75

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.6	0.6	m3
End of 1993:	0.6	0.6	m3
1994:	2.6	2.6	m3/yr
1995:	1.6	1.6	m3/yr
1996:	1.6	1.6	m3/yr
1997:	1.6	1.6	m3/ry
1998-2002:	1.6	1.6	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Cs137		Curies/m3
Ba137m		Curies/m3
Sr90		Curies/m3
Y90		Curies/m3
Pu(unspec)		Curies/m3
Am241		Curies/m3
U(unspec)		Curies/m3

Comments

*This waste stream represents 3 55-gallon drums currently stored in the Lag Storage Building.

The typical waste material weights (kg/m3) are not available for this waste stream.

Typical activity (curies/m3) is unknown for these radionuclides.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV

WASTE TYPE TRU   HANDLING CH   GENERATOR SITE WV

WASTE STREAM MWIR ID	
WIPP ID	WV-T011
Local ID	N/A
MATRIX CODE	5420
SITE FINAL FORM IDC	WV-LAG.7*
STREAM NAME	TRU Glove Boxes (Classified)
DESCRIPTION	Radiologically and hazardous classified glove boxes generated from decomissioning and decontamination activities.
Waste Matrix Code Group	Uncategorized Metal
Site Matrix Description	This waste stream consists of classified (i.e., radiologically and hazardous) glove boxes generated from decommissioning and decontamination activities. The specific contents include glove boxes and tools.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste	X	Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

0012962

SITE NAME WV | WASTE TYPE TRU | HANDLING CH | GENERATOR SITE WV

WV-T011 CONTAINER: Drum
Type/Size: 55-gallon

Container Mat'l: Carbon steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: none
Liner Material:

Number Stored: 2
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.4	m3
End of 1993:	0.4	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Cs137		Curies/m3
Ba137m		Curies/m3
Sr90		Curies/m3
Y90		Curies/m3
Pu(unspec)		Curies/m3
Am241		Curies/m3
U(unspec)		Curies/m3

Comments

*This waste stream represents 2 55-gallon drums currently stored in the Lag Storage Building.

The typical waste material weights (kg/m3) are not available for this waste stream.

Typical activity (curies/m3) is unknown for these radionuclides.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV | **WASTE TYPE** TRU | **HANDLING** RH | **GENERATOR SITE** WV

WASTE STREAM	MWIR ID	
	WIPP ID	WV-T014
	Local ID	N/A
MATRIX CODE		5420
SITE FINAL FORM IDC		WV-CPC.1*

STREAM NAME Chemical Process Cell Vessels

DESCRIPTION Vessels removed from the Chemical Process Cell.

Waste Matrix Code Group Uncategorized Metal

Site Matrix Description This waste stream was generated as a result of the decommissioning and decontamination of the Chemical Process Cell. The specific contents of these containers include evaporators, dissolvers, tanks, condensers, etc. These vessels were previously used to reprocess spent fuel rods.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste		PCBs	
Commercial TRU Waste	X	Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

00 1264

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV | WASTE TYPE TRU | HANDLING RH | GENERATOR SITE WV

WV-T014

CONTAINER:	RH Cannister	Container Matl:	Steel	Liner Type:	Number Stored:
Type/Size:		Int. Vol/Ctnr:	0.89 m3	Liner Material:	Number Projected:

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	435.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	269.7	269.7	m3
End of 1993:	269.7	269.7	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Cs137		Curies/m3
Ba137m		Curies/m3
Sr90		Curies/m3
Y90		Curies/m3
Pu(unspec)		Curies/m3
Am241		Curies/m3
U(unspec)		Curies/m3

Comments

*This waste stream represents 9 boxes ranging from 482ft3 to 1778ft3 in capacity currently stored in the Chemical Process Cell - Waste Storage Area.

The typical waste material weights (kg/m3) are not available for this waste stream.

Typical activity (curies/m3) is unknown for these radionuclides.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV | WASTE TYPE TRU | HANDLING RH | GENERATOR SITE WV

WASTE STREAM MWIR ID		**STREAM NAME**	Chemical Process Cell Miscellaneous Equipment
WIPP ID	WV-T016		
Local ID	N/A	**DESCRIPTION**	Miscellaneous equipment generated from the Chemical Process Cell
MATRIX CODE	5420		
SITE FINAL FORM IDC	WV-CPC.3*		
Waste Matrix Code Group	Uncategorized Metal		
Site Matrix Description	This waste stream was generated as a result of the decommissioning and decontamination of the Chemical Process Cell (CPC). The specific contents of these containers include miscellaneous equipment, etc. The CPC was previously used to reprocess spent fuel rods.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste		TSCA	Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste			PCBs	
Commercial TRU Waste	X	Suspect Mixed TRU		Residues			Other	
Unknown		Unknown		Decon and Decommissioning	X		N/A	X
				Environmental Restoration			Unknown	
				From Treatment of Waste				
				Maintenance				

001265

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV   WASTE TYPE TRU   HANDLING RH   GENERATOR SITE WV

WV-T016

CONTAINER:	RH Cannister	Container Matl:	Steel	Liner Type:	
Type/Size:		Int. Vol/Ctnr:	0.89 m3	Liner Material:	
Number Stored:		Number Projected:			

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	435.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	146.8	146.8	m3
End of 1993:	146.8	146.8	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity
Cs137	Curies/m3
Ba137m	Curies/m3
Sr90	Curies/m3
Y90	Curies/m3
Pu(unspec)	Curies/m3
Am241	Curies/m3
U(unspec)	Curies/m3

Comments

*This waste represents 12 432ft3 boxes currently stored in the Chemical Process Cell - Waste Storage Area.

The typical waste material weights (kg/m3) are not available for this waste stream.

Typical activity (curies/m3) is unknown for these radionuclides.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV

WASTE TYPE TRU HANDLING CH GENERATOR SITE WV

WASTE STREAM	MWIR ID	
	WIPP ID	WV-T017
	Local ID	N/A
MATRIX CODE		3190
SITE FINAL FORM IDC		WV-FRS.1*

STREAM NAME Spent Filter Media

DESCRIPTION Spent filter media generated from normal site activities.

Waste Matrix Code Group Solidified Inorganics

Site Matrix Description This waste stream consists of spent filter media generated from the Fuel Receiving & Storage pool used to store the remaining spent fuel rods.

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU		Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU	X	Operations Waste	X	PCBs	
Commercial TRU Waste	X	Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

0012267

80129

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV WASTE TYPE TRU HANDLING CH GENERATOR SITE WV

WV-T017 CONTAINER: WVDP Standard Waste Box Type/Size:

Container Matl: Carbon steel Int. Vol/Ctnr: 1.7 m3

Liner Type: none Liner Material:

Number Stored: 2 Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	0.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	2.3	2.3	m3
End of 1993:	2.3	2.3	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Cs137		Curies/m3
Ba137m		Curies/m3
Sr90		Curies/m3
Y90		Curies/m3
Pu(unspec)		Curies/m3
Am241		Curies/m3
U(unspec)		Curies/m3

Comments

*This waste stream represents 80ft3 of spent filter media currently stored in a High Integrity Container.

The typical waste material weights (kg/m3) are not available for this waste stream.

Typical activity (curies/m3) is unknown for these radionuclides.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV | WASTE TYPE MTRU | HANDLING CH | GENERATOR SITE WV

WASTE STREAM MWIR ID	WV-W024	**STREAM NAME**	TRU Lead
WIPP ID	WV-W024	**DESCRIPTION**	Elemental Lead
Local ID	N/A		
MATRIX CODE	7200		
SITE FINAL FORM IDC	WV-LED.1*		
Waste Matrix Code Group	Lead/Cadmium Metal Waste		
Site Matrix Description	This waste stream was previously used as lead shielding and was removed from various radiologically contaminated areas of the plant. The containers held heterogeneous lead. The size of the waste stream components is highly variable.		

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste	X	Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning	X	N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance	X		

0270

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV

WASTE TYPE MTRU HANDLING CH GENERATOR SITE WV

WV-W024 CONTAINER: Drum
Type/Size: 55-gallon

Container Matl: Carbon steel
Int. Vol/Ctnr: 0.208 m3

Liner Type: none
Liner Material:

Number Stored: 1
Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.2	0.2	m3
End of 1993:	0.2	0.2	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D008C

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Cs137		Curies/m3
Ba137m		Curies/m3
Sr90		Curies/m3
Y90		Curies/m3
Pu(unspec)		Curies/m3
Am241		Curies/m3
U(unspec)		Curies/m3

Comments

*This waste stream represents 1 55-gallon drum currently stored in the Lag Storage Building.

The typical waste material weights (kg/m3) are not available for this waste stream.

Typical activity (curies/m3) is unknown for these radionuclides.

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV

WASTE TYPE MTRU HANDLING CH GENERATOR SITE WV

WASTE STREAM MWIR ID	WV-W041	**STREAM NAME**	TRU Paint (Dry) with Metals
WIPP ID	WV-W041		
Local ID	N/A	**DESCRIPTION**	Paint chips/solids
MATRIX CODE	3131		
SITE FINAL FORM IDC	WV-PNT.1*		
Waste Matrix Code Group	Solidified Organics		

Site Matrix Description: This waste stream consists of transuranic dried paint containing heavy metals (i.d., lead and chromium). This waste was newly identified as a result of the development of the Historical Waste Report (HWR) in support of the Federal and State Facility Compliance Agreement (FSFCA).

NO MIGRATION VARIANCE PETITION ASSIGNMENT

TRUCON CODE

FINAL WASTE FORM DESCRIPTORS:

Defense TRU Waste		Mixed TRU	X	Rsearch and Devel. Waste		TSCA Asbestos	
Non-Defense TRU Waste		Non-Mixed TRU		Operations Waste		PCBs	
Commercial TRU Waste	X	Suspect Mixed TRU		Residues		Other	
Unknown		Unknown		Decon and Decommissioning		N/A	X
				Environmental Restoration		Unknown	
				From Treatment of Waste			
				Maintenance			

001272

WASTE STREAM PROFILE FOR THE WIPP TRU WASTE BASELINE INVENTORY REPORT

SITE NAME WV   WASTE TYPE MTRU   HANDLING CH   GENERATOR SITE WV

WV-W041 CONTAINER: Drum Type/Size: 55-gallon

Container Mat'l: carbon steel Int. Vol/Ctnr: 0.208 m3

Liner Type: none Liner Material:

Number Stored: 2 Number Projected: 0

TYPICAL WASTE DENSITIES FOR FINAL WASTE FORM (kg/m3)

Material Parameters	Average	Lower Limit	Upper Limit
Iron-based Metals/Alloys	0.0	0.0	0.0
Aluminum-Based Metals/Alloys	0.0	0.0	0.0
Other Metals	0.0	0.0	0.0
Other Inorganic Materials	0.0	0.0	0.0
Cellulosics	0.0	0.0	0.0
Rubber	0.0	0.0	0.0
Plastics	0.0	0.0	0.0
Solidified, Inorganic matrix	0.0	0.0	0.0
Solidified, Organic matrix	0.0	0.0	0.0
Soils	0.0	0.0	0.0
Packaging Materials, Steel	131.0		
Packaging Material, Plastic	0.0		

STORED TRU WASTE -ESTIMATED RATES OF WASTE GENERATION

	Projected	Final Form	
End of 1992:	0.4	0.4	m3
End of 1993:	0.4	0.4	m3
1994:	0.0	0.0	m3/yr
1995:	0.0	0.0	m3/yr
1996:	0.0	0.0	m3/yr
1997:	0.0	0.0	m3/ry
1998-2002:	0.0	0.0	m3/yr
2003-2022:	0.0	0.0	m3/yr

TYPICAL EPA CODES APPLICABLE

D007A

D008A

TYPICAL ISOTOPIC COMPOSITION

Nuclide	Activity	
Cs137		Curies/m3
Ba137m		Curies/m3
Sr90		Curies/m3
Y90		Curies/m3
Pu(unspec)		Curies/m3
Am241		Curies/m3
U(unspec)		Curies/m3

Comments

*This waste stream represents 2 55-gallon drums currently stored in the Lag Storage Building.

The typical waste material weights (kg/m3) are not available for this waste stream.

Typical activity (curies/m3) is unknown for these radionuclides.