

ANNUAL TRANSURANIC WASTE INVENTORY REPORT – 2008

DOE/TRU-2008-3425

Revision 0



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Carlsbad Field Office

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ACRONYMS AND ABBREVIATIONS

AE	Argonne National Laboratory – East (site identifier)
AK	Acceptable Knowledge
AL	Ames Laboratory (site identifier)
AMWTP	Advanced Mixed Waste Treatment Project
ANL	Argonne National Laboratory
ANL-E	Argonne National Laboratory – East (now known as Argonne National Laboratory)
ANL-W	Argonne National Laboratory – West (now known as Materials and Fuels Complex (MFC))
Army	U.S. Army Materiel Command
AW	Argonne National Laboratory – West (site identifier)
BC	Battelle Columbus Laboratory (site identifier)
BAPL	Bettis Atomic Power Laboratory
BCL	Battelle Columbus Laboratories
BL	Babcock and Wilcox Nuclear Energy Services (site identifier)
Bldg	building
BNL	Brookhaven National Laboratory
BT	Bettis Atomic Power Laboratory (site identifier)
CCP	Central Characterization Project
CBFO	Carlsbad Field Office
CCA	Compliance Certification Application
CFR	Code of Federal Regulations
CH	contact-handled
Ci	curie
CID	Comprehensive Inventory Database
CIT	CID Import Template
CPR	cellulosic, plastic, and rubber
CRA	Compliance Recertification Application
CRA-2004	Compliance Recertification Application – 2004
CY	calendar year
D-38	depleted uranium
D&D	decontamination and decommissioning
DOE	U.S. Department of Energy
DOT	U.S. Department of Transportation
EDTA	ethylenediaminetetraacetic acid
EPA	U.S. Environmental Protection Agency
ERMS	Electronic Records Management System (SNL – Carlsbad Program Group record numbering system)

ft	foot or feet
FR	Framatome (site identifier; now known as Areva)
FRP	fiberglass-reinforced plywood
GAO	Government Accounting Office
GE-VNC	General Electric – Vallecitos Nuclear Center
HLB	HB-Line (a Savannah River Site nuclear material processing facility)
Hanford-RL	Hanford (Richland) Site
Hanford-RP	Hanford (River Protection) Site
HEPA	high-efficiency particulate air (filter)
HLW	high-level waste
hr	hour or hours
ICP	Idaho Completion Project
ID	identification (waste stream)
IDC	item description code
IN	Idaho National Laboratory (formerly Idaho National Engineering and Environmental Laboratory (site identifier))
INEEL	Idaho National Engineering and Environmental Laboratory (now known as Idaho National Laboratory)
INL	Idaho National Laboratory
INTEC	Idaho National Technical Engineering Center
ITRI	Inhalation Toxicology Research Institute (now known as Lovelace Respiratory Research Institute (LRRI))
IT	Inhalation Toxicology Research Institute (site identifier)
JASPER	Joint Actinide Shock Physics Experimental Research
KA	Knolls Atomic Power Laboratory-Schenectady (site identifier)
KAPL-S	Knolls Atomic Power Laboratory-Schenectady
KAPL-NFS	Knolls Atomic Power Laboratory – Nuclear Fuels Service
kg	kilogram or kilograms
KN	Knolls Atomic Power Laboratory – Nuclear Fuels Service (site identifier)
l	liter(s)
LA	Los Alamos National Laboratory (site identifier)
LANL	Los Alamos National Laboratory
LANL-CO	Los Alamos National Laboratory – Carlsbad Operations
LB	Lawrence Berkeley National Laboratory (site identifier)
LBL	Lawrence Berkeley Laboratory
LBNL	Lawrence Berkeley National Laboratory
LECO	trade name for manufacturer of crucibles, furnaces and analytical instrumentation
LL	Lawrence Livermore National Laboratory (site identifier)

LLNL	Lawrence Livermore National Laboratory
LLW	low-level waste
LWA	Land Withdrawal Act
m	meter
MC	U.S. Army Materiel Command (site identifier)
MFC	Material and Fuels Complex (formerly Argonne National Laboratory – West)
MFP	mixed fission product
MgO	magnesium oxide
mrem	millirem
MOX	mixed oxide
MTRU	mixed TRU
MU	University of Missouri Research Reactor (site identifier)
NaK	sodium potassium alloy
ND	Nuclear Radiation Development Site, Inc. (site identifier)
NT	Nevada Test Site (site identifier)
NTS	Nevada Test Site
OR	Oak Ridge National Laboratory (site identifier)
ORIGEN 2.2	Oak Ridge Isotope Generation and Depletion Code
ORNL	Oak Ridge National Laboratory
PA	performance assessment
PA	Paducah Gaseous Diffusion Plant (site identifier)
PABC	Performance Assessment Baseline Calculation
POC	pipe overpack component
PVC	polyvinyl chloride
QA	quality assurance
QAPD	Quality Assurance Program Document
R/hr	rem per hour
RCRA	Resource Conservation and Recovery Act
rem	roentgen equivalent man
RF	Rocky Flats Environmental Technology Site (site identifier)
RFETS	Rocky Flats Environmental Technology Site
RH	remote-handled
RL	(Hanford) Richland (site identifier)
RP	(Hanford) Office of River Protection (site identifier)
RSWF	(ANLW) Radioactive Scrap and Waste Facility
RTR	real-time radiography
RWMC	Radioactive Waste Management Complex
SA	Sandia National Laboratories – Albuquerque (site identifier)

SLB	standard large box
SNL-A	Sandia National Laboratories – Albuquerque
SP	Separations Process Research Unit (site identifier)
SR	Savannah River Site (site identifier)
SRS	Savannah River Site
SWB	standard waste box
TB	Teledyne Brown Engineering (site identifier)
TDOP	ten-drum overpack
TRU	transuranic
TRUCON	TRU Waste Content Codes
USAMC	U.S. Army Materiel Command
VN	General Electric Vallecitos Nuclear Center (site identifier)
WAC	Waste Acceptance Criteria
WIPP	Waste Isolation Pilot Plant
WM	waste material
WMP	waste material parameter
WP	WIPP repository (site identifier)
WSP	waste stream profile
WV	West Valley Demonstration Project (site identifier)
WWIS	WIPP Waste Information System

ABBREVIATED TITLES

ATWIR	Annual Transuranic Waste Inventory Report
C&C Agreement	Agreement for Consultation and Cooperation between the Department of Energy and the State of New Mexico on the Waste Isolation Pilot Plant
TWBIR	Transuranic Waste Baseline Inventory Report
TWBIR-2004	Transuranic Waste Baseline Inventory Report – 2004
WTWBIR	WIPP Transuranic Waste Baseline Inventory Report

EXECUTIVE SUMMARY

The U.S. Department of Energy's (DOE's) Waste Isolation Pilot Plant (WIPP) opened on March 26, 1999, becoming the nation's first deep geologic repository for the permanent disposal of defense-generated transuranic (TRU) waste. TRU waste generation has occurred at 39 sites across the country (seven large-quantity and 32 small-quantity sites). Sixteen of these sites (one large site and 15 small quantity sites) have emplaced their waste at WIPP, found other disposition pathways for the waste, or have transferred the waste to other sites for further disposition (LANL-CO, 2007a). Babcock and Wilcox (BL) [this site did not pursue a defense determination and was considered de-inventoried], United States Army Materiel Command (USAMC), Knolls Atomic Power Laboratory – Nuclear Fuels Service (KAPL-NFS), and Lawrence Berkeley National Laboratory (LBNL) have been de-inventoried once, but have identified additional waste after the originally identified waste was removed from the site. TRU waste is currently retrievably stored at 23 sites throughout the DOE complex. As of December 31, 2007, there have been 6340 shipments of TRU waste to WIPP for emplacement since WIPP's opening (DOE 2008a).

Since 1994, DOE complex-wide TRU waste inventory information has been collected, analyzed, and published for WIPP certification purposes in several reports. The *WIPP Transuranic Waste Baseline Inventory Report* (WTWBIR), Revision 0, published in June 1994 (DOE 1994), was the first attempt made by the DOE complex to report all of its TRU waste at the waste-stream level. The TRU waste data reported in Revision 0 were considered preliminary until the TRU waste sites completed quality checks of the data. Data changes resulting from the quality checks were contained in the WTWBIR, Revision 1 (DOE 1995a). The *Transuranic Waste Baseline Inventory Report* (TWBIR), Revisions 2 and 3 (DOE 1995b and DOE 1996a), included WIPP and potential TRU waste streams, along with waste stream characteristic information. Data from Revisions 2 and 3 provided the TRU waste inventory that Sandia National Laboratories–Carlsbad Programs Group (SNL-CPG) used to perform the necessary modeling calculations for the performance assessment (PA) for the initial certification of the WIPP (*Compliance Certification Application* [CCA]) (DOE 1996b).

The U. S. Environmental Protection Agency (EPA) requested that an update to the CCA TRU waste inventory be included in the *WIPP Compliance Recertification Application 2004* (CRA-2004) (DOE 2004) based on the availability of new inventory estimates and characterization data. In response to this request, the TRU waste inventory update was provided with summary data and supplemental information required for the CRA-2004 and was published as Appendix DATA, Attachment F of the CRA-2004.

The primary purpose of the *Transuranic Waste Baseline Inventory Report – 2004* (TWBIR-2004) (DOE 2006), which was a revision of Appendix DATA, Attachment F of the CRA-2004, was to support the Performance Assessment Baseline Calculation (PABC) for the CRA-2004. The TWBIR-2004 provided the summary data required for the PA modeling calculations that were used in the PABC (Leigh et al. 2005), including

two inventory changes at Idaho National Laboratory (INL) and Hanford that occurred during the EPA's review of the CRA-2004. The *Annual Transuranic Waste Inventory Report – 2007* (ATWIR-2007) (DOE 2008b), was the first Annual Inventory Report generated by LANL-CO after TWBIR-2004. The *Annual Transuranic Waste Inventory Report – 2008* (hereafter referred to as “this report”), includes data as of December 31, 2007. These inventory updates are produced by LANL-CO annually to track changes in the TRU waste inventory, and may or may not be used in the WIPP recertification process. The table below lists the inventory reports that were used or proposed to be used in the WIPP certification applications.

Certification/Recertification	Inventory Report Used
CCA	TWBIR, Revisions 2 and 3
CRA-2004	Appendix DATA, Attachment F
PABC	TWBIR-2004
CRA-2009	TWBIR-2004

The WIPP Land Withdrawal Act (LWA) (U.S. Congress 1992) requires EPA to periodically recertify WIPP in accordance with the regulatory requirements established in 40 CFR Part 194.¹ A TRU waste inventory including waste material parameters, radionuclides, and other chemical components important to WIPP performance assessment is developed in accordance with the requirements published in 40 CFR Part 194.24. Under the LWA, five years after the initial receipt of TRU waste at WIPP and every five years thereafter, DOE must submit an application to EPA documenting continued compliance. Once the EPA determines the application is complete, in compliance with the regulatory requirements, the EPA has six months to make a decision to approve or deny the application. DOE submitted the first recertification application, CRA-2004 (DOE 2004), to EPA in March 2004, and EPA recertified WIPP in March 2006. At the time of the publication of this annual report, the second CRA (CRA-2009) has been prepared and is being reviewed for submission (DOE 2009).

This report was developed from changes to the data provided to the TRU waste sites in the ATWIR-2007 (DOE 2008b). The information gathered for this report was entered into the Comprehensive Inventory Database [CID] Version 1.00 Schema Version 1.00, Data Version D.7.00 (hereafter referred to as CID Data Version D.7.00) (LANL-CO 2008a). The CID is a DOE Carlsbad Field Office (CBFO) database qualified in accordance with the CBFO *Quality Assurance Program Document* (QAPD) (DOE 2007). The CID includes estimates for: 1) waste volumes (stored, projected, and emplaced); 2) radionuclides [decayed to a common year 2007 and 2033 {WIPP proposed closure date}]; 3) waste material parameters; 4) complexing agents; 5) oxyanions; 6) solidified cements; 7) packaging materials; and 8) the materials used to emplace TRU waste in the WIPP. Items 4, 5, 6 and 8 above are not included in this report, which provides information on waste streams only, but are collected for PA and will be reported in a

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

separate report when requested by CBFO. For specific container information, the WIPP Waste Information System (WWIS) (DOE 2008d) provides information on containers in waste streams that are emplaced or in the process of being emplaced in WIPP.

The following primary differences were observed at the TRU waste sites between the ATWIR-2007 (DOE, 2008b) and this report:

- Paducah's Gaseous Diffusion Plant TRU waste was re-categorized from potential to WIPP bound, since a waste processing method has been determined.
- TRU waste emplaced between the 1999 opening of the WIPP and December 31, 2007 (the inventory data cut-off date), is addressed in this report.
- General Electric-Vallecitos Nuclear Center (GE-VNC) received a DOE contract and a defense determination for the waste in its Hot Cell; however, the waste remains in potential waste because the site did not provide radionuclides and waste material parameters (LANL-CO 2008b).
- Two new sites were added to this inventory collection: Babcock and Wilcox (BL) (Parks Township waste) and the Nuclear Radiation Development Site (NRD). Both sites are listed as potential waste sites. NRD is pursuing a defense determination (LANL-CO 2008c and LANL-CO 2008d). BL needs a defense determination for the Parks Township waste.
- Hanford RL and the Material Fuel Complex (MFC) have waste streams that exceeded the curie limit allowed in the LWA of 23,000 Ci/m³. These two waste streams were changed from WIPP-bound to potential waste streams.
- Oak Ridge re-aligned all waste stream identifiers to match the identifiers of the waste stream they intend to ship to WIPP.
- The volume of the TRU waste stored on site at West Valley was reduced because much of the waste managed as TRU has been characterized as low-level waste.

This inventory report serves to update TRU waste inventory information last reported in the ATWIR-2007 (DOE 2008b). The information contained in the CID that supports this report is the best estimate of TRU waste inventory information as of December 31, 2007, and includes WWIS data on waste that is emplaced in the WIPP (Van Soest 2008a). The information presented in this report includes qualified reports generated from the CID, as well as TRU waste characterization data obtained from the sites and reported in the WWIS.

The purpose of this report is to provide CBFO with an up-to-date tool for planning and to provide current TRU waste inventory information for DOE and the DOE complex, WIPP stakeholders, and regulators. The TRU waste inventory also supports CBFO compliance with National Environmental Policy Act (NEPA) analyses, the development of new

containers or shipping packages, and planned change requests for containers and other design changes that may take place in the repository.

The following tables summarize the main body of the text of this report:

- Table ES-1 WIPP CH-TRU Waste Inventory by Site
- Table ES-2 WIPP RH-TRU Waste Inventory by Site
- Table ES-3 WIPP CH-TRU Waste Material Parameter Inventory
- Table ES-4 WIPP RH-TRU Waste Material Parameter Inventory
- Table ES-5 WIPP CH- and RH-TRU Radionuclide Inventory Summary (10 WIPP Tracked Radionuclides)

Table ES-1. WIPP CH-TRU Waste Inventory by Site

Storage/Generator Site	Stored Volumes (m ³)	Projected Volumes (m ³)	Anticipated Volumes (m ³)	Emplaced Volumes (m ³)
Argonne National Laboratory – East	1.0E+01	9.2E+01	1.0E+02	1.2E+02
Argonne National Laboratory – West (MFC)	7.9E+00	7.2E+01	7.9E+01	0.0E+00
Bettis Atomic Power Laboratory	1.9E+01	0.0E+00	1.9E+01	0.0E+00
Framatome	6.0E+00	0.0E+00	6.0E+00	0.0E+00
Hanford (Richland) Site	2.0E+04	0.0E+00	2.0E+04	3.3E+03
Idaho National Laboratory	4.0E+04	0.0E+00	4.0E+04	2.1E+04
Knolls Atomic Power Laboratory – Nuclear Fuel Services	4.6E+00	1.5E+02	1.5E+02	0.0E+00
Lawrence Berkeley Laboratory	8.3E-01	6.2E-01	1.5E+00	0.0E+00
Lawrence Livermore National Laboratory	2.7E+02	4.9E+02	7.6E+02	1.4E+02
Los Alamos National Laboratory	1.1E+04	8.5E+02	1.2E+04	2.4E+03
Nevada Test Site	1.7E+02	3.4E+02	5.1E+02	4.0E+02
Oak Ridge National Laboratory	6.9E+02	1.9E+02	8.8E+02	0.0E+00
Paducah Gaseous Diffusion Plant	5.0E+00	0.0E+00	5.0E+00	0.0E+00
Rocky Flats Environmental Technology Site	0.0E+00	0.0E+00	0.0E+00	1.5E+04
Sandia National Laboratories – Albuquerque	2.3E+01	4.4E+00	2.8E+01	0.0E+00
Savannah River Site	5.5E+03	4.5E+03	9.9E+03	1.1E+04
U.S. Army Materiel Command	2.1E-01	0.0E+00	2.1E-01	0.0E+00
Grand Total	7.8E+04	6.7E+03	8.5E+04	5.2E+04

Data Source: CID Data Version D.7.00, LANL-CO 2008a.

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

Table ES-2. WIPP RH-TRU Waste Inventory by Site

Storage/Generator Site	Stored Volumes (m ³)	Projected Volumes (m ³)	Anticipated Volumes (m ³)	Emplaced Volumes (m ³)
Argonne National Laboratory – East	2.7E+01	4.4E+02	4.6E+02	0.0E+00
Argonne National Laboratory – West (MFC)	7.1E+00	5.2E+01	5.9E+01	0.0E+00
Bettis Atomic Power Laboratory	3.6E+00	0.0E+00	3.6E+00	0.0E+00
Hanford (Richland) Site	8.1E+02	3.6E+02	1.2E+03	0.0E+00
Idaho National Laboratory	2.9E+02	0.0E+00	2.9E+02	8.8E+01
Knolls Atomic Power Laboratory – Schenectady	3.0E+01	8.0E+01	1.1E+02	0.0E+00
Los Alamos National Laboratory	9.8E+01	0.0E+00	9.8E+01	0.0E+00
Oak Ridge National Laboratory	4.3E+02	1.1E+02	5.3E+02	0.0E+00
Sandia National Laboratories – Albuquerque	6.2E+00	0.0E+00	6.2E+00	0.0E+00
Savannah River Site	4.6E+01	3.6E+01	8.2E+01	0.0E+00
Grand Total	1.7E+03	1.1E+03	2.8E+03	8.8E+01

Data Source: CID Data Version D.7.00, LANL-CO 2008a.

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

Table ES-3. WIPP CH-TRU Waste Material Parameter Inventory

Waste Material	Average Density (kg/m ³)
Iron-based Metals/Alloys	8.1E+01
Aluminum-based Metals/Alloys	1.5E+00
Other Metal	5.1E+00
Other Inorganic Materials	3.6E+01
Cellulosic	4.0E+01
Rubber	5.6E+00
Plastic	3.8E+01
Cement	1.7E+01
Solidified Inorganic Material	1.1E+02
Solidified Organic Material	3.8E+01
Soils/gravel	1.1E+01
Vitrified	0.0E+00
Package Material	
Packaging Material, Steel	1.9E+02
Packaging Material, Plastic	1.6E+01
Packaging Material, Cellulosic	5.1E+00
Packaging Material, Lead	0.0E+00

Data Source: CID Data Version D.7.00, LANL-CO 2008a.

Table ES-4. WIPP RH-TRU Waste Material Parameter Inventory

Waste Material	Average Density (kg/m³)
Iron-based Metals/Alloys	1.7E+02
Aluminum-based Metals/Alloys	1.0E+01
Other Metal	2.8E+01
Other Inorganic Materials	4.0E+01
Cellulosic	2.2E+01
Rubber	6.6E+00
Plastic	2.8E+01
Cement	4.1E+00
Solidified Inorganic Material	1.1E+02
Solidified Organic Material	3.4E+00
Soils/gravel	2.5E+01
Vitrified	0.0E+00
Package Material	
Packaging Material, Steel	6.3E+02
Packaging Material, Plastic	1.4E+01
Packaging Material, Cellulosic	0.0E+00
Packaging Material, Lead	3.5E+00

Data Source: CID Data Version D.7.00, LANL-CO 2008a.

Table ES-5. WIPP CH- and RH-TRU Radionuclide Inventory Summary (10 WIPP Tracked Radionuclides)

Nuclide	Total CH Activity (Ci)	Total RH Activity (Ci)
Am-241	4.31E+05	3.91E+03
Cs-137	4.70E+02	1.01E+05
Pu-238	8.09E+05	3.58E+03
Pu-239	4.89E+05	2.30E+03
Pu-240	1.38E+05	8.63E+02
Pu-242	6.98E+01	1.18E+00
Sr-90	4.82E+02	8.30E+04
U-233	1.11E+02	3.17E+01
U-234	9.81E+01	2.69E+00
U-238	2.64E+01	1.30E-01
Total	1.87E+06	1.95E+05

Data Source: CID Data Version D.7.00, LANL-CO 2008a.

Note: Summary shows the ten WIPP-tracked CH and RH radionuclides decayed through December 31, 2007.

1.0 INTRODUCTION

The *Annual Transuranic Waste Inventory Report – 2008* (ATWIR-2008) is prepared by the Los Alamos National Laboratory – Carlsbad Office (LANL-CO). This inventory is intended for general information and may be used as the basis for performance assessment (PA) analyses, for use as a tool for strategic planning, in development of site-specific work-off plans, and National Environmental Policy Act (NEPA) analyses. This report includes the background and history of the transuranic (TRU) waste inventory, the sources used to produce inventory information, descriptions of the ways inventory information is used, methodology used to develop the inventory, TRU waste inventory estimates, and identification of potential Waste Isolation Pilot Plant (WIPP) TRU waste.

The background and history section of this report explains how the TRU waste inventory was collected and used for the initial certification of WIPP (section 1.1). Currently, the inventory is collected on an annual basis to monitor how TRU waste inventory is changing. Section 1.2 includes a description of all information sources used to update the Comprehensive Inventory Database (CID). Examples of sources include Acceptable Knowledge (AK) reports, site information, and the WIPP Waste Information System (WWIS) database. Section 1.3 includes uses of TRU waste inventory such as inventory information to support PA, modeling calculations needed for WIPP recertification, NEPA analyses, and strategic planning.

Section 2.0 of this report, Methodology, describes how the LANL-CO TRU waste inventory team collects, compiles, verifies, validates, reports, and analyzes TRU waste inventory information. This section describes how calculations are performed in the CID; how volumes, waste material parameters, and radionuclides are reported; and how emplaced waste data are analyzed. The methodology section also describes how calculations are used in the CID to generate data tables and includes specific calculations for TRU waste volumes, waste material parameters, and radionuclides. The 2004 (DOE 2006) and 2007 (DOE 2008b) reports included scaled radionuclides, waste material parameters, and volumes used in PA to model a full repository. This report includes only that inventory directly reported by the sites (in other words, no scaling has been applied). The radionuclide data in this report were decay-corrected to a common base year (i.e., to the end of 2007) to facilitate accurate comparison. The radiological data provided in Appendix D of this report are decay-corrected to WIPP closure (i.e., 2033) for comparison to data reported in earlier annual reports.

The TRU waste inventory estimate consists of summaries of the inventory information collected from the TRU waste sites and information calculated from the data submitted by the sites. Section 3.1 presents TRU waste volume estimates of contact-handled (CH) waste, remote-handled (RH) waste, and emplaced waste. Both CH and RH-TRU waste volumes are reported as stored, projected, and anticipated (stored plus projected) by site (see Glossary for definitions of stored, projected, and anticipated inventory). Section 3.2 presents the inventory of TRU waste materials and packaging materials. Section 3.3 presents the TRU waste radionuclide activity inventory from each site, rolled up and

decayed through the end of calendar year 2007. The activities of the ten WIPP-tracked radionuclides as regulated by the U.S. Environmental Protection Agency (EPA) are also reported in this section.

Potential TRU waste is waste that, at this time, is not slated to be shipped to WIPP because of insufficient characterization, lack of defense determination, or other technical or regulatory reasons. These reasons are specifically reported on a waste stream basis in section 4.0 of this report and must be addressed prior to shipment of the waste to WIPP.

LANL-CO has prepared this report to include comprehensive data from each TRU waste site. All data are validated by the TRU waste site representative to ensure accuracy.

1.1 Background and History

The U.S. Department of Energy (DOE) opened the WIPP March 26, 1999, as the nation's first deep geologic repository for the permanent disposal of defense-generated TRU waste. The WIPP Land Withdrawal Act (LWA) (U.S. Congress 1992) requires the EPA to periodically recertify WIPP's compliance with regulations published in 40 Code of Federal Regulations (CFR 191 in accordance with criteria established in 40 CFR Part 194.² Under the LWA, five years after the initial receipt of TRU waste at WIPP and every five years thereafter, DOE must submit an application to EPA documenting continued compliance. Once the EPA determines the application is complete, in compliance with the requirements, the EPA has six months to make a decision to approve or deny the application. DOE submitted the first recertification application, *Compliance Recertification Application 2004* (CRA-2004) (DOE 2004), to EPA in March 2004, and EPA recertified WIPP in March 2006. The second recertification (CRA-2009) is currently being prepared (DOE 2009), and is scheduled to be submitted to the EPA in March 2009.

The LWA defines TRU waste as "...waste containing more than 100 nanocuries of alpha-emitting transuranic isotopes per gram of waste, with half-lives greater than 20 years..."³ TRU waste is classified as either CH or RH, depending on the dose rate at the surface of the waste container. CH-TRU waste is packaged TRU waste with an external surface dose rate less than 200 millirem (mrem) per hour [rem: roentgen equivalent man], while RH-TRU waste is packaged TRU waste with an external surface dose rate of 200 mrem per hour or greater, as defined in the LWA. Unless otherwise indicated, for the purpose

² See Pub. L. No. 102-579, § 8, 106 Stat. 4777, 4786-4788 (U.S. Congress 1992), as amended, Waste Isolation Pilot Plant Land Withdrawal Act Amendments, Pub. L. No. 104-201, § 3187, 110 Stat. 2422, 2852 (U.S. Congress 1996).

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

of this report, all references to TRU waste include TRU waste and TRU mixed waste (waste that contains both radioactive and hazardous components), as defined in the Atomic Energy Act of 1954, 42 USC § 2011 *et seq.* (U.S. Congress 1954), and the Resource Conservation and Recovery Act (RCRA), 42 USC § 66901 *et seq.*

Since the TWBIR-2004 (DOE 2006) and ATWIR-2007 (DOE 2008b) were prepared, a number of changes have occurred that affected the volume, physical characteristics, or radiological characteristics of TRU waste streams as they were reported by the sites for the 2007 inventory for this report. The elements that have changed include:

- Waste program management decisions. Many sites have reassessed what their final form container type will be, resulting in changes to final form volumes.
- Increased availability and confidence in supplemental characterization information or process knowledge.
- More certified waste data with continuing waste emplacement at the WIPP. As of December 31, 2007, 52,484 m³ of CH-TRU waste and 88 m³ of RH-TRU waste had been emplaced at the WIPP, reducing the volumes of stored TRU waste.
- The following was not requested from the TRU waste sites, since it is no longer pertinent to the inventory:
 - Latest Vent Date;
 - Pyrochemical Salts (all fields);
 - Current Form Projected Yearly Generation Schedule (all fields); and
 - Final Form – Average Container Mass.
- Additional site guidance. Several sites provided their radionuclide concentration and waste material densities based on the current form containers for the 2006 inventory. LANL-CO issued guidance to all the sites on how these calculations should be performed to be consistent across the complex for the 2007 inventory data (LANL-CO 2008g).

TRU waste generation has occurred at 39 sites across the country (seven large and 32 small quantity sites; see Figure 1-1). Sixteen of these sites have emplaced their waste at WIPP, found other disposition pathways for the waste, or have transferred their waste to other sites for further disposition (LANL-CO 2007a). The remaining TRU waste is currently retrievably stored at 23 sites.

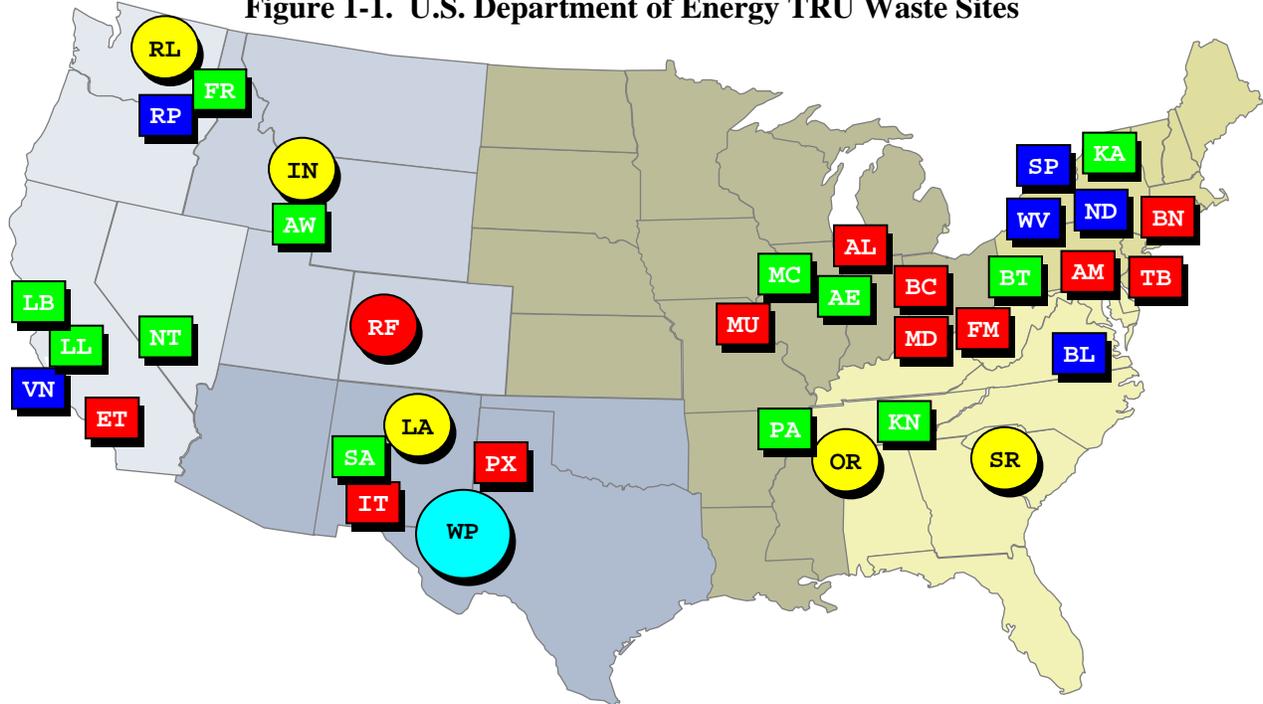
From WIPP's opening on March 26, 1999, through December 31, 2007, the inventory data cut-off date for this report, 6,340 shipments of CH-TRU waste were safely characterized, transported, and disposed at WIPP (DOE 2008a). Depending on programmatic and site waste management decisions, TRU waste inventory information changes frequently. Therefore, the TRU waste inventory is updated annually. This

report, ATWIR-2008, is an update of the TRU waste inventory information as it was known on December 31, 2007. This report includes only TRU waste information on the known and forecasted inventory at this cut-off date and has not been scaled for PA. A separate report containing the detailed information needed for PA will be prepared upon request by CBFO or other WIPP participants.

The methodology used to collect information from the TRU waste sites and enter it into the CID is captured in LANL-CO procedures INV-SP-01, *Data Collection, Data Management and Control for the Comprehensive Inventory* (LANL-CO 2007b), and INV-SP-02, *Entry, Verification and Validation of Inventory Information in the Comprehensive Inventory Database* (LANL-CO 2008e).

The work was performed under the LANL-CO Quality Assurance (QA) Program, which is fully compliant with the requirements set forth in the CBFO QAPD (DOE 2007) and is documented in LCO-QPD-01, *LANL-CO Quality Assurance Plan* (LANL-CO 2007c). The processes used by the LANL-CO TRU Waste Inventory Team to collect, maintain, and report inventory information are graded and implemented to Nuclear Quality Assurance (NQA)-1 standards under the LANL-CO QA Program. This includes the software QA procedures used to qualify the CID and other software used to analyze TRU waste inventory information. LANL-CO software QA is documented in LCO-QPD-02, *Software Quality Assurance Plan* (LANL-CO 2007d), and LCO-QP19-1, *Software Quality Assurance* (LANL-CO 2008f).

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



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

- AE Argonne National Laboratory
- AL Ames Laboratory
- AM ARCO Medical Products—shipped to OSRP
- AW Material and Fuels Complex (MFC)
- BC Battelle Columbus Laboratories (BCL)—shipped to RL and SR
- BL Babcock and Wilcox Nuclear Energy Services (Potential) —(*de-inventoried but has identified new TRU waste)
- BN Brookhaven National Laboratory—shipped to OSRP
- BT Bettis Atomic Power Laboratory (BAPL)
- ET Energy Technology Engineering Center—shipped to RL
- FM Fernald Environmental Management Project—shipped to OSRP
- FR Framatome (AREVA)
- IN Idaho National Laboratory
- IT Inhalation Toxicology Research Institute (ITRI) (known as Lovelace Respiratory Research Institute) - shipped to SA
- KA Knolls Atomic Power Laboratory
- KN Knolls Atomic Power Laboratory-Nuclear Fuels Services—(*de-inventoried but has identified additional TRU waste)
- LA Los Alamos National Laboratory
- LB Lawrence Berkeley Laboratory (LBL) —(*de-inventoried but has identified additional TRU waste)
- LL Lawrence Livermore National Laboratory (LLNL)
- MC U.S. Army Materiel Command (USAMC) —(*de-inventoried but has identified additional TRU waste)
- MD Mound Plant – shipped to SR
- MU University of Missouri Research Reactor—shipped to AE, then to WIPP
- ND Nuclear Radiation Development Site, Inc. (Potential)
- NT Nevada Test Site (NTS)
- OR Oak Ridge National Laboratory
- PA Paducah Gaseous Diffusion Plant
- PX Pantex Plant—shipped to LA
- RF Rocky Flats Environmental Technology Site (RFETS)—shipped to WIPP
- RL Hanford Site (Richland Operations Office)
- RP Hanford Site (Office of River Protection) (Potential)
- SA Sandia National Laboratories
- SP Separations Process Research Unit (Potential)
- SR Savannah River Site (SRS)
- TB Teledyne Brown Engineering—shipped to RF
- VN General Electric Vallecitos Nuclear Center (Potential)
- WV West Valley Demonstration Project (Potential)
- WP Waste Isolation Pilot Plant

1.2 Sources of Transuranic Waste Information

This report includes information taken from: 1) TWBIR Revisions 2 (DOE 1995b) and 3 (DOE 1996a), 2) the TWBIR-2004 (DOE 2006), 3) the ATWIR-2007 (DOE 2008b), 4) Acceptable Knowledge (AK) reports, 5) updated information provided by the TRU waste sites, and 6) the WWIS database. The TWBIR, Revision 2, and the supplemental information found in Revision 3 are included as historical information in this report. The TWBIR-2004 provided TRU waste inventory information for the CRA-2004. The TWBIR-2004 provided the basis of TRU waste inventory data that were evaluated by the sites for the 2006 TRU waste inventory data collection effort. These data were subsequently reported in the ATWIR-2007 (DOE 2008b). For each subsequent year, the sites are asked to update their data from the report from the previous year. As an example, the sites used the ATWIR-2007 data to make the changes for this report. Information obtained from approved site-specific AK reports has been incorporated to provide the most current information on waste streams being characterized and shipped to WIPP. Information obtained from AK reports might include chemical lists, radionuclides, and prohibited items. TRU waste sites are requested to update their TRU waste information by making changes to the templates or the validation reports. Once the data are correct, the new data templates are generated. All TRU waste inventory information for emplaced waste is obtained from the WWIS. Characterization data for emplaced TRU waste (52,484 cubic meters of CH waste and 88 cubic meters of RH waste) through December 31, 2007, are included in this report.

1.3 Uses of Transuranic Waste Inventory Information

A detailed TRU waste inventory update was conducted for the CRA-2004. Detailed information was required for PA modeling calculations that supported this recertification. In addition to supporting WIPP PA, the TRU waste inventory is used for strategic planning for processing waste that has already been generated and is stored in both “currently stored” and “final form” (compliantly packaged and intended for shipment to WIPP) configurations at the TRU waste sites. This information is useful in various waste management scenarios. As an example, CBFO management used TRU waste inventory information to plan waste retrieval, treatment, repackaging, characterization, shipment, and disposal for both stored and projected wastes in past years. In addition, site-specific work plans, which detail approaches for moving TRU waste to WIPP, have been developed and are updated based on current TRU waste inventory information.

The DOE has many reasons for obtaining and tracking non-radiological information about the TRU waste inventory destined for WIPP. For example, the DOE tracks the waste materials that go into the WIPP repository, such as cellulose, plastic and rubber (CPR), because they may affect gas generation in the repository. In addition, the DOE needs to know the non-radiological properties of the waste to support PA, safe transportation of TRU waste, and operation of the WIPP facility.

Other technical uses for the TRU waste inventory are to:

- Provide data for CBFO analyses that support compliance with the NEPA.
- Support the development of new containers or shipping packages and planned change requests for other design changes in the repository.
- Create strategic plans for future waste management.
- Identify other non-radioactive waste materials that account for a significant portion (greater than 5 percent by weight or volume) of a waste stream as a result of changes to the inventory.
- Identify CPR and other biodegradable materials used to facilitate emplacement of waste and magnesium oxide (MgO) in WIPP, supplied as average densities (kilograms per cubic meter (kg/m^3)) for both CH- and RH-TRU waste.
- Identify organic complexing agents and oxyanions (sulfate, nitrate, and phosphate) reported in masses (kg) contributing to studies on actinide solubility.
- Provide data on stored and emplaced waste to support tracking of shipping and emplacement progress.

2.0 METHODOLOGY

This report was generated using a set of documented processes and methodologies that are qualified under the LANL-CO QA Program (see section 1.1). The LANL-CO TRU waste inventory team completed the following steps in order to generate this report:

1. Collected TRU waste stream information from the TRU waste sites via site visits and additional communication, as needed.
2. Entered and verified the updated information in the CID.
3. Generated data tables and associated fields from the CID.
4. Submitted the results as official WIPP records acceptable for use in PA modeling calculations.

The following sections describe the three basic process steps leading to the issuance of this report. Section 2.1 discusses collection, compilation, verification, and validation of TRU waste inventory information. Section 2.2 describes the calculations used in the CID reports. Section 2.3 describes the analysis of the WWIS-emplaced data used to support this report.

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

TRU waste sites were sent their TRU waste inventory information obtained from the ATWIR- – 2007 (DOE 2008b) with the request for data issued in January (Patterson 2008). The information that was reported in the CID Data Version 6.06 (LANL-CO 2007) was downloaded into a Microsoft™ Excel spreadsheet data (template) from the CID. The sites were requested to update any existing information on the Excel data templates provided and add, remove, or correct information.

After the data templates were sent to the sites, the TRU waste inventory team visited the large quantity sites and several small quantity sites to assist them in completing the template. After the templates were complete, the team checked the templates for accuracy and consistency in accordance with INV-SP-01, *Data Collection, Data Management and Control for the Comprehensive Inventory* (LANL-CO 2007b).

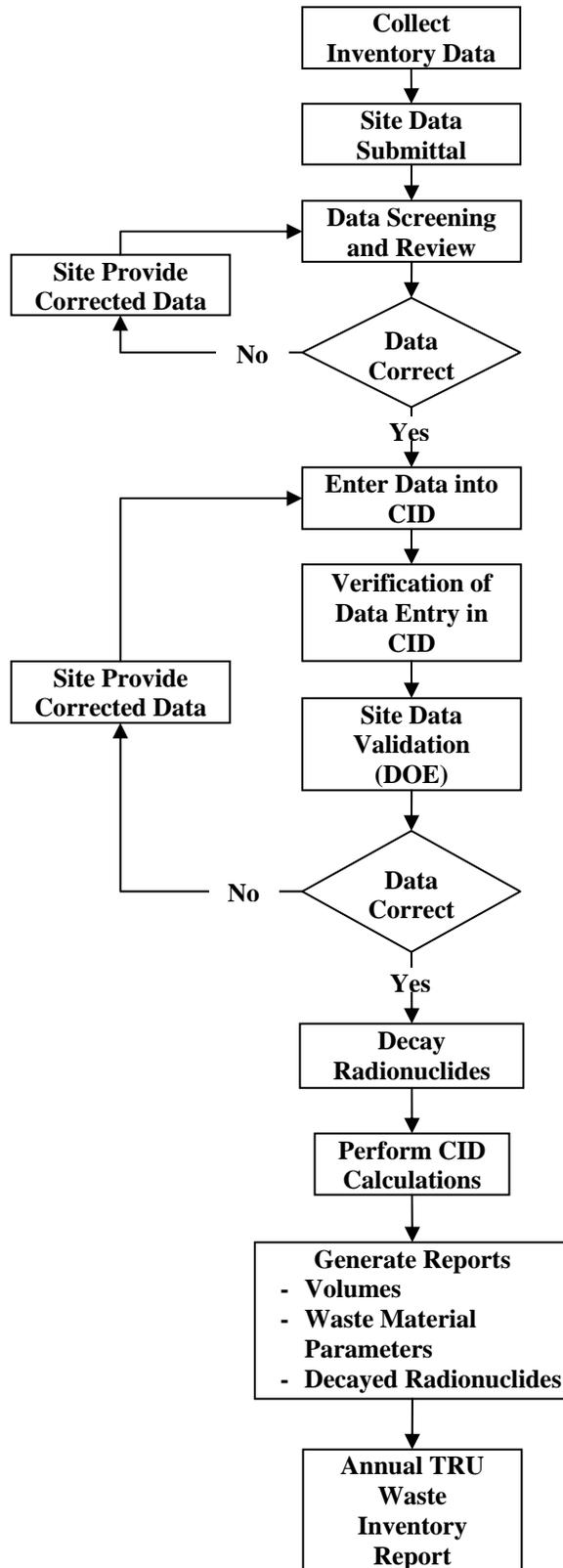
During this data verification, the inventory team verified that the updated inventory updates included all the requested information. The inventory team contacted the sites if any of the data checks and sources of changes appeared to be inaccurate. Data checks included:

- Verification of radionuclide inputs (i.e., if only one fission product was reported or only one radionuclide in secular equilibrium with another was reported);
- Verification and breakout of data on material codes (e.g., plutonium-52 (Pu-52) and mixed fission products (MFPs));
- Verification that reported activity did not exceed the LWA limits. (i.e., waste streams reported with greater than 23,000 curies per cubic meter (Ci/m³) averaged over the volumes of the canister were screened out of inventory);
- Verification that if cement was reported in a comment field, it was also reported as a waste material parameter (in kg/m³);
- Verification that prohibited hazardous waste numbers are not assigned to final form waste and identify treatment that would be applied to make the waste shippable to WIPP, if applicable for a given waste stream.

If discrepancies were found during this data check, the data were corrected in accordance with INV-SP-02, *Entry, Verification and Validation of Inventory Information in the Comprehensive Inventory Database* (LANL-CO 2008e). The TRU waste inventory information was then uploaded from the Excel template or entered manually into the CID and verified by an inventory team member who had not been involved in the population of the template or entry of the data in the database. After this internal, independent verification was complete, validation reports were prepared and sent to the TRU waste site managers. A letter signed by each site manager documented validation of the information in the database. Hard copies of the information and signed letters were then

submitted to the LANL-CO Record Center (see Figure 2-1 for a flow chart of the TRU waste inventory process).

Figure 2-1. TRU Waste Inventory Process Flowchart



2.2 Calculations Used in CID Reports

Data tables included in this report were generated using the CID. The CID is a database developed by LANL-CO and qualified for use under the LANL-CO QA Program in accordance with *LANL-CO Software Quality Assurance Plan*, LCO-QPD-02 (LANL-CO 2007c), and *Software Quality Assurance*, LCO-QP19-1 (LANL-CO 2008f).

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

2.2.1 Volume Reporting

As part of the data call for this report, the TRU waste sites were asked to update the container information about their stored (already-generated and in storage at the site) and projected (future generation) TRU waste. For each waste stream, the sites provided the final form container type(s) that would ultimately be used to ship waste to the WIPP, and determined the respective stored and projected counts for each container type based on the volume of waste either already stored in containers resident on site or expected to be generated in the future. Emplaced container counts by waste stream were obtained from the WWIS, as explained in section 2.3.

A standard final form container type (WIPP-compliant) list, which includes the volume that each container type occupies within the WIPP repository (i.e., the payload container volume), is maintained in the CID. Waste stream volumes were calculated within the CID using the reported counts and the respective container volumes for the container types reported, as shown in equation 1.

$$v_i = \sum_j (s_{ji} + p_{ji} + e_{ji}) \cdot cv_j \quad (1)$$

where:

- v_i is the total volume (stored + projected + emplaced) of waste stream i in m^3
- s_{ji} is the stored count of container type j on waste stream i
- p_{ji} is the projected count of container type j on waste stream i
- e_{ji} is the emplaced count of container type j on waste stream i
- cv_j is the final form volume per container of container type j in m^3

The sites report their stored and projected waste volumes and the WWIS accounts for the emplaced volume.

Site- and WIPP-level roll-up reports were produced for each handling category (CH-TRU and RH-TRU) by summing the final form volumes (stored + projected + emplaced) of the

applicable waste streams by site, as shown in equation 2, and by summing over all sites as shown in equation 3.

$$V_s = \sum_s v_i \quad (2)$$

$$V_w = \sum_w V_s \quad (3)$$

where:

- V_s is the total volume (stored + projected + emplaced) of site s in m^3
- v_i is the total volume (stored + projected + emplaced) of waste stream i in m^3
- V_w is the total volume (stored + projected + emplaced) that will be emplaced at WIPP in m^3

2.2.2 Waste Material Parameter Reporting

As part of the data call for this report, the TRU waste sites were asked to update the information about the materials contained in the waste. For each waste stream, they were asked to revisit the final waste forms and to update, if necessary, the density of each of the waste material parameters (WMPs) for the waste stream. See section 3.2.1 for a description of these WMPs.

Waste streams were sometimes comprised of more than one container type (e.g., 55-gallon drums and standard waste boxes [SWBs]). In these instances the TRU waste site provided only one set of WMPs, which were used for all of the container types reported by the TRU wastes sites. The packaging material parameters were determined by container types and the container counts for all final form containers reported. These packaging materials were based on packaging densities determined for standard container types reported in McInroy (2008). The CID contains a single WMP list for every waste stream. However, the waste profiles in Appendices A through C include a weighted average of the packaging material densities for all of the WIPP-approved container types reported in the waste stream, calculated as shown in equations 4, 5, and 6:

$${}^{PM}m_{ij} = {}^{PM}p_j \cdot cv_{ij} \quad (4)$$

$${}^{PM}M_i = \sum_i {}^{PM}m_{ij} \quad (5)$$

$${}^{PM}P_i = {}^{PM}M_i / v_i \quad (6)$$

where:

- ${}^{PM}m_{ij}$ is the mass of the packaging material (PM) of container type j on waste stream i in kg
- ${}^{PM}p_j$ is the density of the PM for container type j in kg/m^3
- cv_{ij} is the total volume in m^3 (stored + projected + emplaced) of a container type j in waste stream i

- $^{PM}M_i$ is the total mass of PM in waste stream i in kg
 $^{PM}P_i$ is the average density of the PM in waste streams i in kg/m³
 v_i is the total volume (stored + projected + emplaced) of a waste stream i in m³

The roll-up of WMP average densities for each handling category (CH and RH) required combining data from all of the WIPP-bound waste streams reported for the respective category. A weighted average value for the WMP based on the individual waste stream volumes in the total inventory was calculated in the CID from the WMP average densities provided by the sites as shown in equations 7, 8, and 9:

$$^{WM}m_i = ^{WM}p_i \cdot v_i \quad (7)$$

$$^{WM}M = \sum_i ^{WM}m_i \quad (8)$$

$$^{WM}P = ^{WM}M / V \quad (9)$$

where:

- $^{WM}m_i$ is the mass of the waste material (WM) in waste stream i in kg
 $^{WM}p_i$ is the average density of the WM in waste stream i in kg/m³
 v_i is the total volume (stored + projected + emplaced) of waste stream i in m³
 ^{WM}M is the total mass of the WM in all WIPP-bound waste streams in kg
 ^{WM}P is the average density of the WM in all (stored + projected + emplaced) WIPP-bound waste streams in kg/m³
 V is the volume of all (stored + projected + emplaced) WIPP-bound waste streams in m³

2.2.3 Radionuclide Reporting

The TRU waste sites were asked to update information about the radiological components in the waste they intend to ship to WIPP. For each waste stream, they were asked to assess and update when necessary, radionuclides and their associated activity concentrations (in Ci/m³). Where new radiological information was provided, the TRU waste sites provided the generation or last assay date for the updated waste stream to provide the starting date for decay calculations.

Since radionuclide data provided by the TRU waste sites consisted of radionuclide activity concentrations at the date of assay (generation or as calculated), radionuclide activity concentrations reported on a waste stream basis were decay-corrected to a common date to facilitate comparison of data. Therefore, all radionuclide data provided in this report in Tables ES-5, 3-5, 3-6, and 3-7, and in Appendices A and B are decay-corrected to the common base year of calendar year (CY) 2007 (December 31, 2007). In order to facilitate comparison to previous TRU waste inventory reports, radionuclide concentrations are also decay-corrected to the WIPP proposed closure year, CY 2033, and are presented in Appendix D of this report.

The radionuclide activity concentrations reported by the TRU waste sites were exported from the CID into an external application, Oak Ridge National Laboratory (ORNL) Radiation Safety Information Computational Center *RSICC Computer Code Collection: ORIGEN 2.2, Isotope Generation and Depletion Code Matrix Exponential Method* (ORNL 2002), where the radionuclide decay calculations were performed, and then imported back into the CID. ORIGEN 2.2 uses a matrix exponential method to solve a large system of coupled, linear, first-order ordinary differential equations with constant coefficients. ORIGEN 2.2 is qualified for use under the LANL-CO QA Program in accordance with *LANL-CO Software Quality Assurance Plan, LCO-QPD-02* (LANL-CO 2007c), and *Software Quality Assurance, LCO-QP19-1* (LANL-CO 2008f). A separate analysis describing the use of TransOrigen.xls, a pre- and post-processor Excel workbook application for ORIGEN 2.2, is used to qualify data transfers and unit conversion. This workbook provides a user-friendly interface to process TRU waste stream data from ORIGEN 2.2 by facilitating the creation of input files and post-processing the output files (Van Soest 2008b).

Waste stream volumes were used to calculate waste stream radionuclide activity from the decay-corrected activity concentrations as shown in equation 10.

$${}^{\text{RN}}a_i = {}^{\text{RN}}ac_i \cdot v_i \quad (10)$$

where:

${}^{\text{RN}}a_i$	is the activity of the radionuclide (RN) for waste stream i in Ci
${}^{\text{RN}}ac_i$	is the decay-corrected radionuclide activity concentration in Ci/m ³ from ORIGEN 2.2 for radionuclide (RN) for waste stream i
v_i	is the total volume (stored + projected + emplaced) for waste stream i in m ³

The site-level roll-up radionuclide activities were calculated for both CH- and RH-TRU waste as shown in equation 11.

$${}^{\text{RN}}A_s = \sum_i {}^{\text{RN}}a_i \quad (11)$$

where:

${}^{\text{RN}}A_s$	is the total activity (in Ci) for a radionuclide in CH- or RH-TRU waste from a generator site
${}^{\text{RN}}a_i$	is the activity (in Ci) of the radionuclide RN for a single waste stream i

2.3 Analysis of WIPP Waste Information System/Emplaced Data

In order to account for TRU waste emplaced in the WIPP repository at the time of the inventory cut-off date, a documented request was made of the WWIS database administrators to supply data for the waste emplaced as of December 31, 2007. To update the emplaced inventory data within the CID, the WWIS data submittal was first migrated into standardized CID import template (CIT) files. This migration to the CIT files required that the original WWIS data submittal undergo various transformations, including but not limited to calculations, aggregations, and data mapping. An analysis was performed (Van Soest 2008a) to document these activities and calculations in order to properly format the WWIS data for insertion into the CIT files. The CIT files were subsequently used to update the CID. The emplaced inventory is included in sections 3.1 through 3.3 of this report.

3.0 TRANSURANIC WASTE INVENTORY ESTIMATES

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

This presentation of the TRU waste inventory consists of summaries of the inventory information collected from the TRU waste sites and information calculated from the data submitted by the sites. Section 3.1 presents TRU waste volume information provided by the sites for CH- and RH-TRU waste and the final form volume of emplaced waste in the WIPP repository. Data for emplaced waste were obtained from the WWIS (Van Soest 2008a). Section 3.2 presents the non-radiological properties of the TRU waste inventory as reported by the sites and the WWIS. This includes roll-ups of the waste materials (section 3.2.1), and packaging materials (section 3.2.2). Section 3.3 presents the TRU waste radionuclide inventory reported by the sites and the WWIS that has been decayed through common year 2007.

The TRU waste inventory, as collected from the TRU waste sites, is presented by waste stream in Appendices A, B, and C. Appendix A presents individual waste stream profiles (WSPs) for all TRU waste streams planned for emplacement in the WIPP repository. Appendix B presents individual WSPs for all TRU waste streams that were emplaced in WIPP as of December 31, 2007. Appendix C presents individual WSPs for potential-WIPP TRU waste streams, as discussed in section 4.0 of this report. Appendix D presents comparisons of last year's data to this report for volume, waste and packaging materials, and radionuclide data. Appendix E presents the crosswalk of waste streams between the ATWIR-2007 and this report.

3.1 TRU Waste Volume Estimates

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

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

3.1.1 Emplaced Volumes by Site

Data on waste emplaced in the WIPP repository were obtained from the WWIS and uploaded to the CID after conversion using the analysis discussed in section 2.3. The information was provided by container type and count. The volume for the emplaced waste was calculated using the same container volumes as used for the final form containers from the TRU waste sites so that there was consistency with all WIPP-approved containers. The last column of Table 3-1 shows the total emplaced CH-TRU waste final form volume by TRU waste site, and the last column of Table 3-2 shows the total emplaced RH-TRU waste volume by TRU waste site.

3.1.2 Stored, Projected, and Anticipated Volumes by Site

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

Table 3-1 shows the total CH-TRU waste stored, projected, anticipated (stored plus projected), and emplaced using final form payload volumes anticipated to be shipped to WIPP and broken out by TRU waste site. There is a total of approximately 137,000 m³ of CH-TRU waste emplaced or anticipated to be shipped to WIPP in the future. Approximately 98% of the anticipated CH-TRU waste is stored or will be generated at large quantity TRU sites: Hanford RL, INL, LANL, ORNL and SRS; and

99% of the emplaced CH-TRU waste was shipped and emplaced by Hanford RL, INL, LANL, SRS, and RFETS (see Appendix D for comparisons to CH-TRU waste volumes reported last year).

Table 3-2 shows the total RH-TRU waste stored, projected, anticipated, and emplaced using final form payload volumes anticipated to be shipped to WIPP and broken out by site. Approximately 2,900 m³ of RH-TRU waste are emplaced or anticipated to be shipped to WIPP in the future. Approximately 79% of the anticipated RH-TRU waste is stored or will be generated from large quantity sites: Hanford RL, INL, ORNL, LANL and SRS. At the time of inventory data cut off, only INL had shipped approximately 88 m³ of RH-TRU waste to WIPP (see Appendix D for comparisons to RH-TRU waste volumes reported last year).

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

Storage/Generator Site	Stored Volumes (m ³)	Projected Volumes (m ³)	Anticipated Volumes (m ³)	Emplaced Volumes (m ³)
Argonne National Laboratory – East	1.0E+01	9.2E+01	1.0E+02	1.2E+02
Argonne National Laboratory – West (MFC)	7.9E+00	7.2E+01	7.9E+01	0.0E+00
Bettis Atomic Power Laboratory	1.9E+01	0.0E+00	1.9E+01	0.0E+00
Framatome	6.0E+00	0.0E+00	6.0E+00	0.0E+00
Hanford (Richland) Site	2.0E+04	0.0E+00	2.0E+04	3.3E+03
Idaho National Laboratory	4.0E+04	0.0E+00	4.0E+04	2.1E+04
Knolls Atomic Power Laboratory – Nuclear Fuel Services	4.6E+00	1.5E+02	1.5E+02	0.0E+00
Lawrence Berkeley Laboratory	8.3E-01	6.2E-01	1.5E+00	0.0E+00
Lawrence Livermore National Laboratory	2.7E+02	4.9E+02	7.6E+02	1.4E+02
Los Alamos National Laboratory	1.1E+04	8.5E+02	1.2E+04	2.4E+03
Nevada Test Site	1.7E+02	3.4E+02	5.1E+02	4.0E+02
Oak Ridge National Laboratory	6.9E+02	1.9E+02	8.8E+02	0.0E+00
Paducah Gaseous Diffusion Plant	5.0E+00	0.0E+00	5.0E+00	0.0E+00
Rocky Flats Environmental Technology Site	0.0E+00	0.0E+00	0.0E+00	1.5E+04
Sandia National Laboratories – Albuquerque	2.3E+01	4.4E+00	2.8E+01	0.0E+00
Savannah River Site	5.5E+03	4.5E+03	9.9E+03	1.1E+04
U.S. Army Materiel Command	2.1E-01	0.0E+00	2.1E-01	0.0E+00
Grand Total	7.8E+04	6.7E+03	8.5E+04	5.2E+04

Data Source: CID Data Version D.7.00 LANL-CO 2008a.

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

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

Storage/Generator Site	Stored Volumes (m³)	Projected Volumes (m³)	Anticipated Volumes (m³)	Emplaced Volumes (m³)
Argonne National Laboratory – East	2.7E+01	4.4E+02	4.6E+02	0.0E+00
Argonne National Laboratory – West (MFC)	7.1E+00	5.2E+01	5.9E+01	0.0E+00
Bettis Atomic Power Laboratory	3.6E+00	0.0E+00	3.6E+00	0.0E+00
Hanford (Richland) Site	8.1E+02	3.6E+02	1.2E+03	0.0E+00
Idaho National Laboratory	2.9E+02	0.0E+00	2.9E+02	8.8E+01
Knolls Atomic Power Laboratory – Schenectady	3.0E+01	8.0E+01	1.1E+02	0.0E+00
Los Alamos National Laboratory	9.8E+01	0.0E+00	9.8E+01	0.0E+00
Oak Ridge National Laboratory	4.3E+02	1.1E+02	5.3E+02	0.0E+00
Sandia National Laboratories – Albuquerque	6.2E+00	0.0E+00	6.2E+00	0.0E+00
Savannah River Site	4.6E+01	3.6E+01	8.2E+01	0.0E+00
Grand Total	1.7E+03	1.1E+03	2.8E+03	8.8E+01

Data Source: CID Data Version D.7.00, LANL-CO 2008a.

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

3.2 Waste and Packaging Materials

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

This section presents the non-radiological properties of the TRU waste inventory that was collected for this report. Section 3.2.1 presents the inventory of waste materials and section 3.2.2 presents the inventory of packaging materials.

3.2.1 Waste Materials

As part of the data call for this report, the TRU waste sites were asked to provide the average density (kg/m³) of each of the WMPs in each waste stream at their sites.

The following WMP descriptions were excerpted from the TWBIR, Revision 2 (DOE 1995b), and are operative in this report:

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

The estimated WIPP WMP average densities for CH- and RH-TRU waste are presented in Tables 3-3 and 3-4, respectively. The largest contribution to CH-TRU waste is solidified inorganic material (sludge) followed by iron-based metals from debris. Conversely, the largest contribution to RH-TRU waste is iron-based metal from debris followed by solidified inorganic material.

3.2.2 Packaging Materials

Packaging materials (such as steel, plastic, cellulose, and lead) are the materials used to construct the containers that hold TRU waste. PA assumes that packaging materials are distributed homogeneously throughout the WIPP repository. As a result, a WIPP average value for packaging material densities is provided. The WIPP packaging material average densities (kg/m^3) for CH- and RH-TRU waste are presented in Tables 3-3 and 3-4, respectively.

Packaging material densities have historically been reported by the TRU waste sites. With the development of the CID, the packaging material densities for the WIPP-approved payload containers are fixed values in the CID. The sites report the final form container type, and the CID populates the packaging material densities with consistent values associated with the container type. An analysis was performed (McInroy 2008) to calculate the packaging material densities to be used in the CID. The purpose of this analysis was to document calculations that provided the packaging material densities for steel, plastic, cellulose, and lead, which may be used in the containers that package CH- and RH-TRU waste for shipment to WIPP. This analysis was revised since the 2007 inventory report (ATWIR-2007) to correct a volume discrepancy with the ten-drum overpack (TDOP). DOE/CBFO directed LANL-CO to use a payload volume of 4.5 m^3 for the TDOP, which is the volume used in the WWIS. This volume correction made in the CID has produced a small final form volume difference for sites using the TDOP.

Table 3-3. WIPP CH-TRU Waste Material Parameter Average Densities

Waste Material	Average Density (kg/m^3)
Iron-based Metals/Alloys	8.1E+01
Aluminum-based Metals/Alloys	1.5E+00
Other Metal	5.1E+00
Other Inorganic Materials	3.6E+01
Cellulosic	4.0E+01
Rubber	5.6E+00
Plastic	3.8E+01
Cement	1.7E+01
Solidified Inorganic Material	1.1E+02
Solidified Organic Material	3.8E+01
Soils/gravel	1.1E+01
Vitrified	0.0E+00
Package Material	
Packaging Material, Steel	1.9E+02
Packaging Material, Plastic	1.6E+01
Packaging Material, Cellulosic	5.1E+00
Packaging Material, Lead	0.0E+00

Data Source: CID Data Version D.7.00, LANL-CO 2008a.

Table 3-4. WIPP RH-TRU Waste Material Parameter Average Densities

Waste Material	Average Density (kg/m³)
Iron-based Metals/Alloys	1.7E+02
Aluminum-based Metals/Alloys	1.0E+01
Other Metal	2.8E+01
Other Inorganic Materials	4.0E+01
Cellulosic	2.2E+01
Rubber	6.6E+00
Plastic	2.8E+01
Cement	4.1E+00
Solidified Inorganic Material	1.1E+02
Solidified Organic Material	3.4E+00
Soils/gravel	2.5E+01
Vitrified	0.0E+00
Package Material	
Packaging Material, Steel	6.3E+02
Packaging Material, Plastic	1.4E+01
Packaging Material, Cellulosic	0.0E+00
Packaging Material, Lead	3.5E+00

Data Source: CID Data Version D.7.00, LANL-CO 2008a.

3.3 TRU Waste Radionuclide Inventory

This section presents the TRU waste radionuclide activity inventory collected for this report. The sites' TRU waste stream and respective WIPP emplaced waste stream radionuclides are aggregated and these roll-ups are decayed through the end of CY 2007. The activities of the ten WIPP-tracked radionuclides as regulated by the EPA in accordance with 40 CFR Parts 191 and 194 (EPA 1993 and 1996) are reported.

3.3.1 Radionuclide Inventory by Site

Tables 3-5 and 3-6 provide the comprehensive WIPP-bound TRU waste site and respective aggregated WIPP emplaced radionuclide TRU waste inventory activity estimates in total curies for CH- and RH-TRU waste, respectively. The radionuclides are decayed from the sites reported waste stream assay or generation year as described in section 2.2.3 of this report.

The waste profiles in Appendices A (WIPP-bound waste) and B (WIPP-emplaced waste) are reported in activity concentrations for each waste stream. These radionuclide activity concentrations (Ci/m³) have been decayed from the waste stream assay/generation year through the end of CY 2007. Radionuclide activity concentrations presented in Appendix C (WIPP potential waste) are as reported by the TRU waste sites.

Table 3-5. CH Radionuclides (Ci) on a Site Basis Decayed Through 2007

Nuclide	ANLE	ANLW (MFC)	Army	BAPL	Fram	Hanford	INL	KAPL-NFS	LANL	LBL	LLNL	NTS	ORNL	Paducah	RFETS	SNL-A	SRS	Total
Ac-225	1.01E-02	1.11E-03	6.29E-12	2.86E-13	3.47E-18	2.36E-03	7.20E-04	2.04E-04	1.30E-01	1.02E-07	1.36E-10	8.86E-04	1.53E+00	1.30E-07	6.82E-05	5.92E-06	1.74E-03	1.68E+00
Ac-227	2.11E-07	7.29E-08	9.95E-15	2.11E-10	3.79E-18	8.59E-07	2.93E-05	6.59E-07	4.57E+00	4.42E-05	5.09E-03	5.79E-05	8.71E-02	3.95E-07	6.98E-07	1.20E-03	8.03E-03	4.67E+00
Ac-228	3.20E-05	4.99E-07	--	3.90E-14	--	8.43E-04	2.29E-14	8.98E-03	2.28E-03	1.42E-09	1.04E-16	2.51E-15	9.67E-03	--	1.52E-09	4.42E-03	1.61E-03	2.78E-02
Ag-108	--	--	--	--	--	--	--	--	6.31E-09	--	--	--	--	--	--	--	--	6.31E-09
Ag-108m	--	--	--	--	--	--	--	--	7.09E-08	--	--	--	--	--	--	--	--	7.09E-08
Ag-109m	8.46E-03	--	--	--	--	1.12E-05	--	--	5.95E-04	--	--	--	5.30E-08	--	6.78E-09	1.56E-05	--	9.09E-03
Ag-110	6.20E-06	--	--	--	--	--	--	--	--	--	--	--	2.02E-13	--	--	--	--	6.20E-06
Ag-110m	4.71E-04	--	--	--	--	--	--	--	--	--	--	--	2.52E-02	--	--	--	--	2.56E-02
Am-241	1.11E+02	9.27E+01	--	9.64E-03	2.18E-05	8.98E+04	1.53E+05	3.41E+01	6.46E+04	8.99E-02	1.86E+03	2.94E+02	6.36E+02	2.02E-01	1.17E+05	1.11E+01	3.57E+03	4.31E+05
Am-242	--	--	--	--	--	3.62E-02	--	--	--	--	3.58E-02	--	--	--	--	1.45E-05	2.23E-01	2.95E-01
Am-242m	--	--	--	--	--	3.68E-02	--	--	--	--	5.45E+00	--	--	--	--	1.47E-05	2.26E-01	5.71E+00
Am-243	1.89E+00	3.35E+00	--	4.02E-05	--	8.13E-01	1.81E+01	--	1.92E+00	1.35E-03	2.47E-01	2.99E-01	2.95E+00	--	1.08E-02	1.53E-06	9.09E+00	3.86E+01
Am-245	--	--	--	--	--	--	--	--	7.02E-15	4.31E-12	--	--	4.51E-12	--	--	--	--	8.82E-12
At-217	1.01E-02	1.11E-03	6.30E-12	2.86E-13	3.47E-18	2.36E-03	7.21E-04	2.04E-04	1.30E-01	1.02E-07	1.36E-10	8.87E-04	1.53E+00	1.30E-07	6.83E-05	5.92E-06	1.74E-03	1.68E+00
Ba-133	--	--	--	--	--	5.54E-04	--	--	1.67E-05	--	--	--	1.02E-06	--	9.99E-03	--	2.01E-05	1.06E-02
Ba-137m	3.45E+00	8.31E-01	--	1.81E+01	--	2.06E+02	9.18E-01	--	4.75E+00	1.10E-09	1.92E-05	5.36E-03	3.73E+00	9.52E-03	1.02E-02	5.39E+01	1.43E+02	4.35E+02
Bi-210	2.54E-04	4.99E-09	--	4.84E-12	2.09E-17	1.12E-02	5.69E-08	1.06E-05	5.02E-01	1.81E-15	1.02E-11	2.51E-02	2.42E-01	1.83E-05	9.39E-06	1.96E-02	5.59E-06	7.99E-01
Bi-211	2.08E-07	7.19E-08	9.82E-15	2.08E-10	3.74E-18	8.48E-07	2.90E-05	6.51E-07	4.52E+00	4.37E-05	1.44E-09	5.72E-05	8.61E-02	3.90E-07	6.89E-07	1.18E-03	7.94E-03	4.62E+00
Bi-212	2.36E-01	3.84E-07	--	1.10E-05	--	2.76E-02	6.57E-04	4.19E-02	2.95E+01	1.56E-09	1.25E-02	3.21E-03	2.94E+00	--	1.31E-09	4.50E-03	1.40E+00	3.42E+01
Bi-213	1.00E-02	1.10E-03	6.28E-12	2.85E-13	3.46E-18	2.36E-03	7.19E-04	2.04E-04	1.30E-01	1.02E-07	1.35E-10	8.85E-04	1.53E+00	1.30E-07	6.82E-05	5.91E-06	1.74E-03	1.67E+00
Bi-214	2.05E-03	4.32E-08	--	9.74E-11	1.44E-16	2.40E-02	1.70E-06	1.45E-04	8.79E-01	1.69E-14	3.42E-10	5.21E-02	4.86E-01	7.83E-05	7.96E-05	5.88E-02	2.89E-05	1.50E+00
Bk-249	--	--	--	--	--	--	--	--	4.86E-10	2.98E-07	6.50E-01	--	3.12E-07	--	--	--	--	6.50E-01
Bk-250	--	--	--	--	--	--	--	--	--	--	--	--	2.48E-12	--	--	--	--	2.48E-12
C-14	--	--	--	5.38E-04	--	1.60E+00	--	--	--	--	--	5.31E-05	1.96E-03	--	1.12E-05	--	1.86E+00	3.46E+00
Cd-109	8.57E-03	--	--	--	--	1.13E-05	--	--	6.03E-04	--	4.35E-02	--	5.36E-08	--	6.86E-09	1.58E-05	--	5.27E-02
Ce-141	--	--	--	--	--	--	--	--	--	--	--	--	7.09E-01	--	--	--	--	7.09E-01
Ce-144	--	--	--	--	--	--	--	--	3.11E-07	--	--	--	2.29E-01	--	--	3.29E-06	5.14E-02	2.81E-01
Cf-249	1.68E-01	--	--	7.69E-13	--	3.37E-04	--	--	1.38E-02	3.64E-03	2.18E+01	2.44E-03	3.73E-01	--	--	--	2.08E-03	2.23E+01
Cf-250	--	--	--	--	--	--	--	--	1.65E-05	4.13E-07	2.99E-04	2.27E-02	3.23E-02	--	--	--	1.25E-03	5.65E-02
Cf-251	--	--	--	3.63E-14	--	--	--	--	1.56E-03	--	1.29E-03	--	2.49E-04	--	--	--	8.52E-03	1.16E-02
Cf-252	1.31E-04	--	--	--	--	--	--	--	--	--	1.02E+00	4.67E-03	8.62E-01	--	1.47E-04	--	3.90E+00	5.79E+00
Cl-36	--	--	--	--	--	--	--	--	2.00E-03	--	--	--	--	--	3.52E-08	--	--	2.00E-03
Cm-242	--	--	--	--	--	2.39E-02	--	--	2.01E-01	--	--	--	2.47E-01	--	--	1.22E-05	2.18E-01	6.91E-01
Cm-243	5.26E-01	--	--	4.02E-05	--	1.25E-01	4.96E-05	--	7.80E-01	1.75E-04	6.91E-02	7.46E-03	1.27E-01	--	--	4.14E-01	1.45E-01	2.19E+00
Cm-244	1.16E-01	--	--	2.12E-03	--	3.07E+01	6.82E+00	--	8.75E+01	2.53E-03	7.56E+02	2.90E+01	9.48E+02	--	1.34E-07	4.65E+00	5.41E+02	2.40E+03
Cm-245	5.50E-05	--	--	2.76E-07	--	1.98E-08	--	--	1.70E-03	1.80E-06	2.71E-02	1.07E-03	4.07E-03	--	--	--	8.90E-02	1.23E-01
Cm-246	--	--	--	4.70E-08	--	--	--	--	2.13E-02	7.48E-06	--	1.27E-04	8.97E-01	--	--	--	1.31E-01	1.05E+00
Cm-247	--	--	--	1.08E-13	--	--	--	--	2.07E-05	--	1.80E-06	--	3.64E-08	--	--	--	9.71E-03	9.73E-03
Cm-248	1.84E-09	--	--	1.95E-13	--	--	--	--	--	3.04E-05	1.21E-02	8.74E-06	2.83E-02	--	8.92E-09	--	3.60E-05	4.06E-02
Cm-250	--	--	--	--	--	--	--	--	--	--	--	--	3.17E-11	--	--	--	--	3.17E-11
Co-60	2.11E-01	--	--	4.90E-01	--	4.11E-01	--	--	2.98E-02	--	1.30E-03	7.06E-08	1.50E-02	--	4.60E-05	1.52E-02	2.66E-01	1.44E+00
Cs-134	2.31E-03	--	--	--	--	2.72E+00	--	--	6.27E-09	--	--	--	1.28E-01	--	--	4.88E-03	5.21E+00	8.06E+00
Cs-137	3.69E+00	8.89E-01	--	1.94E+01	--	2.22E+02	1.74E+00	--	5.08E+00	1.18E-09	5.68E-01	5.73E-03	5.67E+00	1.02E-02	1.09E-02	5.76E+01	1.53E+02	4.70E+02
Es-254	--	--	--	--	--	--	--	--	--	--	--	--	7.43E-13	--	--	--	--	7.43E-13
Eu-150	--	--	--	--	--	--	--	--	--	--	--	--	2.12E-03	--	--	--	--	2.12E-03

Table 3-5. CH Radionuclides (Ci) on a Site Basis Decayed Through 2007
Continued

Nuclide	ANLE	ANLW (MFC)	Army	BAPL	Fram	Hanford	INL	KAPL-NFS	LANL	LBL	LLNL	NTS	ORNL	Paducah	RFETS	SNL-A	SRS	Total
Eu-152	3.36E-01	--	--	7.32E-01	--	5.39E-03	--	--	2.12E-03	1.17E-08	6.90E-01	1.49E-01	4.21E-01	--	6.36E-05	--	2.41E-04	2.34E+00
Eu-154	3.62E-03	--	--	6.32E-01	--	1.53E+00	--	--	1.15E-03	--	1.22E-02	4.76E-02	3.00E-01	--	4.54E-07	7.73E-02	4.70E+00	7.30E+00
Eu-155	--	--	--	--	--	2.98E-03	--	--	1.87E-03	--	8.34E-05	--	1.85E-01	--	4.22E-08	5.25E-04	1.46E-01	3.37E-01
Fe-55	--	--	--	--	--	3.81E-03	--	--	3.43E-07	--	--	--	--	--	9.53E-05	--	--	3.91E-03
Fr-221	1.00E-02	1.10E-03	6.29E-12	2.86E-13	3.46E-18	2.36E-03	7.19E-04	2.04E-04	1.30E-01	1.02E-07	1.35E-10	8.86E-04	1.53E+00	1.30E-07	6.82E-05	5.91E-06	1.74E-03	1.67E+00
Fr-223	2.88E-09	9.94E-10	1.36E-16	2.88E-12	5.17E-20	1.17E-08	3.99E-07	8.99E-09	6.24E-02	6.03E-07	1.99E-11	7.90E-07	1.19E-03	5.39E-09	9.52E-09	1.64E-05	1.09E-04	6.37E-02
Gd-152	2.59E-15	--	--	7.25E-15	--	3.34E-19	--	--	8.39E-18	1.75E-22	8.41E-19	9.72E-15	2.62E-14	--	4.91E-19	--	9.46E-19	4.58E-14
H-3	--	--	--	--	--	1.58E+00	--	--	1.61E+03	8.78E-05	4.59E-06	8.17E-03	4.58E+00	--	7.11E+00	3.57E-07	7.66E+02	2.39E+03
Ho-166m	--	--	--	--	--	--	--	--	--	--	--	--	2.62E-05	--	--	--	--	2.62E-05
I-129	--	--	--	7.07E-06	--	1.80E-06	--	--	1.20E-06	--	--	--	--	--	--	--	1.61E+00	1.61E+00
K-40	3.93E-03	--	--	--	--	1.35E-03	9.29E-05	--	--	--	2.51E-05	--	--	--	--	--	--	5.40E-03
Kr-85	--	--	--	--	--	3.57E+00	--	--	--	--	--	2.19E-02	--	--	2.07E-05	1.86E-01	6.36E+00	1.01E+01
Mn-54	1.17E-03	--	--	--	--	--	--	--	1.49E-17	1.25E-17	--	--	2.63E-14	--	7.14E-12	--	--	1.17E-03
Na-22	2.61E-02	--	--	--	--	8.94E-03	--	--	1.44E-01	--	3.52E-05	--	1.44E-08	--	2.95E-04	6.46E-08	2.57E-02	2.05E-01
Nb-93m	--	--	--	2.45E-04	--	--	--	--	--	--	--	--	--	--	--	--	--	2.45E-04
Nb-94	--	--	--	--	--	1.72E-04	--	--	8.73E-08	--	1.32E-08	--	--	--	--	--	1.90E-06	1.74E-04
Nb-95	--	--	--	--	--	--	--	--	1.97E-07	--	--	--	--	--	--	--	--	1.97E-07
Nb-95m	--	--	--	--	--	--	--	--	2.69E-10	--	--	--	--	--	--	--	--	2.69E-10
Ni-59	--	--	--	7.77E-02	--	--	--	--	--	--	--	--	--	--	--	--	1.50E-02	9.27E-02
Ni-63	--	--	--	3.64E+00	--	2.96E-01	--	--	--	--	--	--	6.72E-05	--	1.20E-01	--	--	4.06E+00
Np-237	5.30E-01	4.04E-01	3.95E-05	5.73E-05	1.29E-10	1.65E+00	2.24E+00	5.44E-05	1.02E+00	1.56E-03	9.53E-02	2.17E-02	4.54E-01	2.20E+00	1.16E+00	1.45E-02	9.28E+00	1.91E+01
Np-238	--	--	--	--	--	1.82E-04	--	--	--	--	--	--	--	--	--	7.28E-08	1.12E-03	1.30E-03
Np-239	1.86E+00	3.31E+00	--	3.97E-05	--	1.47E-01	5.07E-06	--	1.89E+00	1.33E-03	1.56E-02	2.95E-01	2.95E+00	--	1.06E-02	1.51E-06	8.87E+00	1.94E+01
Np-240m	3.35E-17	2.26E-06	--	6.79E-13	--	2.67E-10	--	--	2.98E-04	1.22E-05	--	2.14E-07	2.44E-08	--	2.50E-16	--	7.65E-13	3.12E-04
Pa-231	8.85E-07	5.58E-07	4.13E-14	2.80E-09	1.99E-17	7.26E-06	9.16E-05	8.73E-06	1.60E-02	1.16E-04	3.87E-02	1.73E-04	1.72E-01	1.72E-06	8.60E-06	4.40E-03	9.84E-04	2.33E-01
Pa-233	5.25E-01	4.01E-01	3.92E-05	5.68E-05	1.27E-10	7.57E-01	1.10E+00	5.39E-05	1.01E+00	1.55E-03	7.33E-02	2.15E-02	4.50E-01	2.18E+00	1.15E+00	1.44E-02	9.16E+00	1.68E+01
Pa-234	9.88E-05	2.10E-06	--	1.57E-10	2.46E-19	1.46E-03	1.92E-02	1.37E-05	1.87E-03	1.39E-10	4.55E-06	7.93E-05	8.22E-05	1.64E-04	1.82E-03	6.06E-07	1.11E-04	2.49E-02
Pa-234m	7.60E-02	1.61E-03	--	1.21E-07	1.89E-16	1.12E+00	1.48E+01	1.05E-02	1.44E+00	1.07E-07	3.50E-03	6.09E-02	6.32E-02	1.26E-01	1.40E+00	4.66E-04	8.50E-02	1.92E+01
Pb-209	1.01E-02	1.10E-03	6.29E-12	2.86E-13	3.47E-18	2.36E-03	7.20E-04	2.04E-04	1.30E-01	1.02E-07	1.36E-10	8.86E-04	1.53E+00	1.30E-07	6.82E-05	5.92E-06	1.74E-03	1.68E+00
Pb-210	2.56E-04	5.05E-09	--	4.90E-12	2.12E-17	1.13E-02	5.76E-08	1.08E-05	5.08E-01	1.83E-15	1.03E-11	2.54E-02	2.45E-01	1.86E-05	9.50E-06	1.98E-02	5.66E-06	8.09E-01
Pb-211	2.09E-07	7.20E-08	9.84E-15	2.09E-10	3.75E-18	8.49E-07	2.90E-05	6.52E-07	4.53E+00	4.37E-05	1.44E-09	5.73E-05	8.62E-02	3.91E-07	6.90E-07	1.19E-03	7.95E-03	4.62E+00
Pb-212	2.35E-01	3.83E-07	--	1.09E-05	--	2.76E-02	6.55E-04	4.17E-02	2.94E+01	1.55E-09	2.22E-17	3.20E-03	2.93E+00	--	1.31E-09	4.49E-03	1.39E+00	3.41E+01
Pb-214	2.05E-03	4.33E-08	--	9.76E-11	1.44E-16	2.41E-02	1.71E-06	1.45E-04	8.80E-01	1.69E-14	3.43E-10	5.22E-02	4.87E-01	7.84E-05	7.98E-05	5.89E-02	2.90E-05	1.50E+00
Pm-147	--	--	--	2.52E-01	--	1.84E+01	--	--	1.17E-04	--	--	--	7.38E-03	--	4.10E-05	1.00E-01	5.90E+00	2.46E+01
Po-210	2.56E-04	5.05E-09	--	4.90E-12	2.11E-17	1.13E-02	3.48E-08	1.08E-05	5.07E-01	1.83E-15	6.31E-12	2.54E-02	2.44E-01	1.85E-05	9.50E-06	1.98E-02	5.65E-06	8.09E-01
Po-211	6.36E-10	2.20E-10	3.00E-17	6.36E-13	1.14E-20	2.59E-09	8.84E-08	1.99E-09	1.38E-02	1.33E-07	4.39E-12	1.75E-07	2.63E-04	1.19E-09	2.10E-09	3.61E-06	2.42E-05	1.41E-02
Po-212	1.50E-01	2.45E-07	--	6.99E-06	--	1.76E-02	4.19E-04	2.67E-02	1.88E+01	9.93E-10	1.42E-17	2.04E-03	1.87E+00	--	8.35E-10	2.87E-03	8.89E-01	2.18E+01
Po-213	9.84E-03	1.08E-03	6.15E-12	2.80E-13	3.39E-18	2.31E-03	7.04E-04	1.99E-04	1.27E-01	9.94E-08	1.33E-10	8.67E-04	1.50E+00	1.27E-07	6.68E-05	5.79E-06	1.70E-03	1.64E+00
Po-214	2.05E-03	4.33E-08	--	9.76E-11	1.44E-16	2.41E-02	1.71E-06	1.45E-04	8.80E-01	1.69E-14	3.43E-10	5.22E-02	4.87E-01	7.84E-05	7.97E-05	5.89E-02	2.89E-05	1.50E+00
Po-215	2.09E-07	7.21E-08	9.84E-15	2.09E-10	3.75E-18	8.49E-07	2.90E-05	6.52E-07	4.53E+00	4.37E-05	1.44E-09	5.73E-05	8.62E-02	3.91E-07	6.90E-07	1.19E-03	7.95E-03	4.63E+00
Po-216	2.35E-01	3.82E-07	--	1.09E-05	--	2.75E-02	6.55E-04	4.17E-02	2.94E+01	1.55E-09	2.22E-17	3.19E-03	2.93E+00	--	1.31E-09	4.48E-03	1.39E+00	3.40E+01
Po-218	2.02E-03	4.26E-08	--	9.59E-11	1.42E-16	2.37E-02	1.68E-06	1.42E-04	8.65E-01	1.66E-14	3.37E-10	5.13E-02	4.79E-01	7.71E-05	7.84E-05	5.79E-02	2.85E-05	1.48E+00
Pr-144	--	--	--	--	--	--	--	--	3.05E-07	--	--	--	2.60E-09	--	--	3.22E-06	5.04E-02	5.04E-02
Pu-236	1.93E-08	--	--	--	--	--	4.21E-05	--	5.53E-12	--	2.99E-03	--	3.10E-13	--	--	--	--	3.03E-03
Pu-238	7.57E+01	1.82E+02	--	9.08E-01	7.56E-06	2.58E+04	2.34E+04	3.90E+00	1.79E+05	2.58E-03	2.24E+03	1.03E+02	1.27E+03	2.89E-03	1.05E+04	7.94E-01	5.66E+05	8.09E+05

Table 3-5. CH Radionuclides (Ci) on a Site Basis Decayed Through 2007
Continued

Nuclide	ANLE	ANLW (MFC)	Army	BAPL	Fram	Hanford	INL	KAPL-NFS	LANL	LBL	LLNL	NTS	ORNL	Paducah	RFETS	SNL-A	SRS	Total
Pu-239	2.23E+02	1.69E+02	5.05E-03	7.37E-04	4.34E-06	1.29E+05	6.20E+04	1.22E+02	5.99E+04	2.41E-02	1.93E+03	1.18E+03	6.96E+02	5.55E-01	2.23E+05	7.31E+00	1.10E+04	4.89E+05
Pu-240	1.35E+02	3.90E+01	--	1.51E-03	2.59E-06	4.80E+04	1.38E+04	1.22E+02	1.54E+04	3.32E-04	5.71E+02	1.72E+02	4.00E+02	--	5.60E+04	8.00E-01	3.00E+03	1.38E+05
Pu-241	1.85E+02	3.43E+02	--	1.27E-01	1.33E-04	7.98E+05	1.24E+05	1.42E+02	9.55E+04	6.78E-03	6.95E+03	2.22E+03	1.99E+03	--	5.84E+05	5.54E+00	7.58E+04	1.69E+06
Pu-242	6.87E-02	1.17E-02	--	1.17E-05	6.03E-08	1.73E+01	2.21E+00	--	4.09E+01	4.41E-05	1.55E-01	3.33E-02	3.05E-01	--	6.08E+00	7.59E-05	2.74E+00	6.98E+01
Pu-243	--	--	--	1.06E-13	--	--	--	--	2.05E-05	--	--	--	3.59E-08	--	--	--	9.60E-03	9.62E-03
Pu-244	3.32E-17	2.24E-06	--	6.73E-13	--	2.64E-10	--	--	2.95E-04	1.21E-05	--	2.12E-07	2.41E-08	--	2.48E-16	--	7.58E-13	3.09E-04
Ra-223	2.11E-07	7.28E-08	9.95E-15	2.11E-10	3.79E-18	8.58E-07	2.93E-05	6.59E-07	4.58E+00	4.42E-05	1.46E-09	5.79E-05	8.71E-02	3.95E-07	6.98E-07	1.20E-03	8.04E-03	4.68E+00
Ra-224	2.35E-01	3.82E-07	--	1.09E-05	--	2.75E-02	6.54E-04	4.16E-02	2.94E+01	1.55E-09	2.21E-17	3.19E-03	2.92E+00	--	1.30E-09	4.48E-03	1.39E+00	3.40E+01
Ra-225	1.01E-02	1.11E-03	6.30E-12	2.86E-13	3.47E-18	2.36E-03	7.21E-04	2.04E-04	1.30E-01	1.02E-07	1.36E-10	8.87E-04	1.53E+00	1.30E-07	6.83E-05	5.92E-06	1.74E-03	1.68E+00
Ra-226	2.08E-03	4.38E-08	--	9.87E-11	1.46E-16	2.92E-02	2.05E-05	1.46E-04	8.90E-01	1.71E-14	3.46E-10	5.28E-02	4.92E-01	7.93E-05	8.06E-05	5.96E-02	2.93E-05	1.53E+00
Ra-228	3.77E-05	5.90E-07	--	4.60E-14	--	9.96E-04	2.71E-14	1.06E-02	2.69E-03	1.68E-09	1.23E-16	2.96E-15	1.14E-02	--	1.80E-09	5.22E-03	1.90E-03	3.29E-02
Rh-106	--	--	--	--	--	--	--	--	3.78E-10	--	--	--	7.79E-07	--	--	2.71E-06	1.64E-01	1.64E-01
Rn-219	2.08E-07	7.20E-08	9.83E-15	2.09E-10	3.74E-18	8.48E-07	2.90E-05	6.51E-07	4.52E+00	4.37E-05	1.44E-09	5.72E-05	8.61E-02	3.90E-07	6.89E-07	1.18E-03	7.94E-03	4.62E+00
Rn-220	2.35E-01	3.82E-07	--	1.09E-05	--	2.75E-02	6.55E-04	4.17E-02	2.94E+01	1.55E-09	2.22E-17	3.20E-03	2.93E+00	--	1.31E-09	4.49E-03	1.39E+00	3.40E+01
Rn-222	2.05E-03	4.33E-08	--	9.77E-11	1.45E-16	2.41E-02	1.71E-06	1.45E-04	8.81E-01	1.69E-14	3.43E-10	5.23E-02	4.87E-01	7.85E-05	7.99E-05	5.90E-02	2.90E-05	1.51E+00
Ru-103	--	--	--	--	--	--	--	--	--	--	--	--	3.34E-01	--	--	--	--	3.34E-01
Ru-106	--	--	--	--	--	--	--	--	3.81E-10	--	--	--	1.51E+00	--	--	2.73E-06	1.66E-01	1.67E+00
Sb-125	4.46E-06	--	--	--	--	2.96E+00	--	--	1.19E-04	--	2.53E-06	--	8.88E-02	--	1.03E-08	--	4.87E-03	3.06E+00
Sb-126	--	--	--	1.36E-05	--	2.66E-01	--	--	--	--	--	--	--	--	--	--	5.48E-03	2.72E-01
Sb-126m	--	--	--	9.72E-05	--	1.90E+00	--	--	--	--	--	--	--	--	--	--	3.91E-02	1.94E+00
Sc-46	--	--	--	--	--	--	--	--	1.14E-26	--	--	--	--	--	--	--	--	1.14E-26
Se-75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.28E-10	--	--	1.28E-10
Se-79	--	--	--	1.34E-04	--	4.79E-07	--	--	--	--	--	--	--	--	--	--	2.96E-02	2.98E-02
Sm-147	--	--	--	1.70E-11	--	1.36E-10	--	--	2.13E-12	--	--	--	6.03E-11	--	1.89E-15	3.21E-11	9.65E-11	3.44E-10
Sm-151	--	--	--	1.01E-01	--	2.44E+00	--	--	7.65E-04	--	--	--	1.11E-01	--	--	2.06E-01	1.38E+00	4.24E+00
Sn-126	--	--	--	9.73E-05	--	1.90E+00	--	--	--	--	--	--	--	--	--	--	3.92E-02	1.94E+00
Sr-89	--	--	--	--	--	8.70E-11	--	--	--	--	--	--	--	--	--	--	--	8.70E-11
Sr-90	3.20E+00	4.40E+00	--	1.93E+01	--	1.77E+02	1.39E-02	--	3.83E+00	--	6.41E-01	3.95E-04	2.12E+01	--	3.26E-02	5.72E+01	1.96E+02	4.82E+02
Tc-99	3.44E+00	--	--	4.76E-03	--	3.82E+00	--	7.51E-01	--	--	--	--	9.20E+00	5.49E+00	6.02E-08	3.27E-08	7.08E-01	2.34E+01
Te-123	--	--	--	--	--	--	--	--	--	--	--	--	7.15E-19	--	--	--	--	7.15E-19
Te-123m	--	--	--	--	--	--	--	--	--	--	--	--	8.02E-24	--	--	--	--	8.02E-24
Te-125m	1.08E-06	--	--	--	--	7.06E-01	--	--	2.88E-05	--	--	--	1.09E-04	--	2.49E-09	--	1.23E-03	7.07E-01
Th-227	2.05E-07	7.09E-08	9.69E-15	2.06E-10	3.69E-18	8.36E-07	2.86E-05	6.41E-07	4.46E+00	4.30E-05	1.42E-09	5.64E-05	8.48E-02	3.85E-07	6.79E-07	1.17E-03	7.83E-03	4.55E+00
Th-228	2.38E-01	3.87E-07	--	1.11E-05	--	2.82E-02	2.64E-03	4.20E-02	2.97E+01	1.57E-09	5.36E-03	3.23E-03	2.96E+00	--	1.32E-09	4.54E-03	1.41E+00	3.44E+01
Th-229	1.01E-02	1.11E-03	6.30E-12	2.86E-13	3.47E-18	2.36E-03	7.22E-04	2.04E-04	1.30E-01	1.02E-07	1.90E-02	8.88E-04	1.53E+00	1.30E-07	6.84E-05	5.93E-06	1.74E-03	1.70E+00
Th-230	4.01E-06	1.46E-05	--	9.12E-08	4.76E-14	8.71E-05	1.11E-04	6.76E-02	1.07E-01	7.84E-12	2.27E-04	7.43E-06	5.95E-03	1.02E-02	1.02E-04	7.47E-07	4.16E-03	1.95E+01
Th-231	3.25E-03	2.90E-03	1.38E-10	2.61E-05	8.88E-14	7.95E-02	2.23E+00	8.16E-02	7.58E-02	2.65E-07	4.92E-04	9.89E-01	5.28E-03	4.68E-03	8.29E-02	2.69E-04	3.10E-02	3.58E+00
Th-232	3.66E-05	8.35E-07	--	1.32E-13	8.37E-22	5.78E-03	1.12E-06	2.25E-02	2.48E-03	3.12E-09	1.32E-05	6.45E-15	2.33E-02	--	4.56E-09	4.65E-03	6.27E-03	6.51E-02
Th-234	7.61E-02	1.62E-03	--	1.21E-07	1.89E-16	1.12E+00	1.48E+01	1.06E-02	1.44E+00	1.07E-07	3.67E-03	6.11E-02	6.33E-02	1.26E-01	1.40E+00	4.67E-04	8.51E-02	1.92E+01
Tl-204	--	--	--	--	--	--	--	--	--	9.44E-12	--	--	6.54E-07	--	1.08E-06	--	--	1.73E-06
Tl-207	2.08E-07	7.16E-08	9.79E-15	2.08E-10	3.73E-18	8.44E-07	2.88E-05	6.48E-07	4.50E+00	4.35E-05	1.43E-09	5.70E-05	8.57E-02	3.88E-07	6.86E-07	1.18E-03	7.91E-03	4.60E+00
Tl-208	8.46E-02	1.38E-07	--	3.94E-06	--	9.92E-03	2.36E-04	1.50E-02	1.06E+01	5.59E-10	6.56E-03	1.15E-03	1.05E+00	--	4.70E-10	1.62E-03	5.00E-01	1.23E+01
Tl-209	2.21E-04	2.43E-05	1.38E-13	6.28E-15	7.62E-20	5.19E-05	1.58E-05	4.48E-06	2.86E-03	2.24E-09	2.98E-12	1.95E-05	3.36E-02	2.85E-09	1.50E-06	1.30E-07	3.83E-05	3.68E-02
U-232	2.31E-01	--	--	1.30E-05	--	1.26E+00	1.95E-03	--	2.89E+01	--	3.64E-03	3.14E-03	3.19E+00	--	--	--	2.09E+00	3.57E+01
U-233	1.01E-01	1.31E+00	4.81E-09	1.22E-09	5.49E-15	6.24E+00	3.78E+00	4.35E-01	4.29E+01	1.81E-04	8.17E+00	8.67E-01	4.54E+01	1.62E-04	1.07E-01	6.33E-03	1.61E+00	1.11E+02

Table 3-5. CH Radionuclides (Ci) on a Site Basis Decayed Through 2007
Continued

Nuclide	ANLE	ANLW (MFC)	Army	BAPL	Fram	Hanford	INL	KAPL-NFS	LANL	LBL	LLNL	NTS	ORNL	Paducah	RFETS	SNL-A	SRS	Total
U-234	8.99E-02	8.59E-02	--	2.04E-03	4.90E-10	6.06E+00	7.56E+00	4.36E-01	2.50E+01	1.15E-07	5.15E-02	1.12E-01	1.42E+01	8.82E-02	2.23E+00	8.31E-03	4.22E+01	9.81E+01
U-235	3.30E-03	3.18E-03	1.39E-10	2.65E-05	8.99E-14	2.10E-01	2.44E+00	8.26E-02	7.67E-02	2.69E-07	2.85E-03	1.00E+00	5.35E-03	4.74E-03	8.39E-02	2.72E-04	3.15E-02	3.95E+00
U-236	5.49E-05	6.66E-04	--	3.02E-04	1.61E-12	4.86E-03	3.87E-01	8.26E-02	1.10E-02	6.84E-11	1.50E-05	2.45E-05	9.47E-02	--	1.14E-02	6.20E-08	4.53E-02	6.38E-01
U-237	4.53E-03	5.55E-03	--	3.11E-06	3.27E-09	5.00E+00	1.63E+00	3.48E-03	2.35E+00	1.67E-07	5.05E-02	5.44E-02	4.87E-02	--	1.43E+01	1.36E-04	1.80E+00	2.53E+01
U-238	7.68E-02	1.63E-03	--	1.22E-07	1.91E-16	3.32E+00	1.86E+01	1.07E-02	1.46E+00	1.08E-07	9.41E-03	6.16E-02	6.39E-02	1.28E-01	1.42E+00	4.71E-04	1.24E+00	2.64E+01
U-240	3.28E-17	2.22E-06	--	6.66E-13	--	2.61E-10	--	--	2.92E-04	1.19E-05	--	2.10E-07	2.39E-08	--	2.45E-16	--	7.50E-13	3.06E-04
Y-90	3.16E+00	4.35E+00	--	1.91E+01	--	1.73E+02	1.21E-02	--	3.79E+00	--	6.42E-01	3.91E-04	8.70E+00	--	3.23E-02	5.66E+01	8.62E+01	3.55E+02
Zn-65	1.77E-04	--	--	--	--	--	--	--	3.85E-08	--	--	--	8.72E-17	--	--	--	--	1.77E-04
Zr-93	--	--	--	1.14E-03	--	--	--	--	--	--	--	--	--	--	--	--	--	1.14E-03
Zr-95	--	--	--	--	--	--	--	--	3.67E-08	--	--	--	1.81E-01	--	--	--	--	1.81E-01
Total	7.55E+02	8.45E+02	5.13E-03	8.28E+01	1.70E-04	1.09E+06	3.77E+05	4.25E+02	4.17E+05	1.37E-01	1.44E+04	4.00E+03	6.11E+03	1.11E+01	9.90E+05	2.57E+02	6.62E+05	3.56E+06

Data Source: CID Data Version D.7.00, LANL-CO 2008a.

Table 3-6. RH Radionuclides (Ci) on a Site Basis Decayed Through 2007

Nuclide	ANLE	ANLW (MFC)	BAPL	Hanford	INL	KAPL-S	LANL	ORNL	SNL-A	SRS	Total
Ac-225	2.13E-06	6.94E-11	3.20E-02	4.53E-05	3.72E-04	1.33E-09	3.87E-13	1.42E+00	2.50E-11	2.96E-07	1.45E+00
Ac-227	1.52E-07	1.04E-08	1.13E-01	1.59E-06	2.87E-07	6.56E-08	1.86E-06	3.79E-03	2.27E-08	2.05E-08	1.16E-01
Ac-228	6.30E-15	2.62E-13	2.60E-03	3.80E-06	4.70E-05	4.33E-11	8.23E-15	9.74E-03	1.13E-17	1.84E-13	1.24E-02
Ag-109m	--	--	--	--	--	--	--	4.96E-08	--	--	4.96E-08
Ag-110	--	--	--	--	--	--	--	2.77E-13	--	--	2.77E-13
Ag-110m	--	--	--	--	--	--	--	2.11E-11	--	--	2.11E-11
Am-241	3.96E+01	7.09E+00	4.20E+00	1.55E+03	2.04E+03	3.75E-02	2.21E+00	1.25E+02	2.88E+01	1.06E+02	3.91E+03
Am-242	--	1.93E-03	6.73E-03	7.20E-03	2.58E-04	--	--	--	--	1.87E-01	2.04E-01
Am-242m	--	1.97E-03	6.84E-03	7.33E-03	2.63E-04	--	--	--	--	1.91E-01	2.07E-01
Am-243	1.23E-04	2.07E-04	2.60E-02	5.08E-01	6.89E-04	6.14E-05	--	8.65E-01	--	1.67E+00	3.07E+00
Am-245	--	--	--	--	--	--	--	6.90E-15	--	--	6.90E-15
At-217	2.13E-06	6.94E-11	3.21E-02	4.53E-05	3.73E-04	1.33E-09	3.87E-13	1.42E+00	2.51E-11	2.96E-07	1.45E+00
Ba-133	--	--	4.35E-07	--	--	--	--	--	--	--	4.35E-07
Ba-137m	1.47E+02	1.30E+04	1.12E+04	6.30E+04	1.56E+03	7.49E+01	1.46E+03	1.82E+03	5.55E+02	1.70E+03	9.45E+04
Bi-210	5.13E-10	5.23E-10	9.27E-06	2.19E-09	1.23E-10	4.34E-09	6.30E-10	4.87E+00	1.85E-10	1.01E-08	4.87E+00
Bi-211	1.50E-07	1.03E-08	1.11E-01	1.57E-06	2.83E-07	6.49E-08	1.84E-06	3.74E-03	2.24E-08	2.02E-08	1.15E-01
Bi-212	6.33E-15	9.43E-14	8.79E+00	1.84E-05	4.41E-05	3.41E-05	8.27E-15	2.68E+00	6.01E-18	4.30E-04	1.15E+01
Bi-213	2.13E-06	6.93E-11	3.20E-02	4.52E-05	3.72E-04	1.33E-09	3.86E-13	1.41E+00	2.50E-11	2.96E-07	1.45E+00
Bi-214	2.46E-09	1.31E-08	1.60E-05	1.52E-08	9.44E-10	1.47E-08	2.67E-09	9.79E+00	1.93E-09	5.34E-08	9.79E+00
Bk-249	--	--	--	--	--	--	--	4.77E-10	--	--	4.77E-10
Bk-250	--	--	--	--	--	--	--	8.73E-13	--	--	8.73E-13
C-14	--	--	3.32E-06	3.15E-04	--	2.16E-03	--	1.84E-03	--	9.86E-04	5.30E-03
Cd-109	--	--	--	--	--	--	--	5.02E-08	--	--	5.02E-08
Cd-113m	1.81E+00	--	--	2.29E-03	--	--	--	--	--	--	1.81E+00
Ce-144	9.06E-11	1.59E+01	--	2.43E-08	5.15E-11	--	--	3.03E-09	--	4.30E-07	1.59E+01
Cf-249	--	--	--	--	--	4.60E-12	--	7.28E-02	--	5.55E-09	7.28E-02
Cf-250	--	--	--	--	--	--	--	2.69E-02	--	7.67E-08	2.69E-02
Cf-251	--	--	--	--	--	5.84E-14	--	3.56E-04	--	2.18E-09	3.56E-04
Cf-252	--	--	--	--	--	5.84E-16	--	7.97E-02	--	7.82E-03	8.75E-02
Cm-242	2.54E-24	1.63E-03	5.66E-03	7.79E-03	2.17E-04	--	--	1.47E-15	--	1.57E-01	1.72E-01
Cm-243	--	5.48E-05	1.14E-02	2.57E+00	7.39E-03	1.55E-05	--	2.61E-02	4.54E-02	5.19E-01	3.17E+00
Cm-244	5.97E-01	1.84E-03	5.47E-01	8.64E+01	1.20E-02	1.46E-03	--	3.41E+02	4.67E-01	1.39E+02	5.69E+02
Cm-245	--	--	8.86E-07	2.41E-04	--	5.68E-07	--	1.34E-04	--	2.46E-02	2.49E-02
Cm-246	--	--	--	--	--	7.39E-08	--	1.52E+00	--	2.10E-02	1.54E+00
Cm-247	--	--	--	--	--	1.74E-13	--	3.52E-10	--	3.46E-08	3.49E-08
Cm-248	--	--	--	--	--	3.45E-13	--	4.33E-03	--	2.24E-06	4.33E-03
Cm-250	--	--	--	--	--	--	--	1.59E-11	--	--	1.59E-11
Co-60	4.50E-01	2.34E+01	--	2.28E+01	3.27E-01	--	2.56E-01	2.75E+00	2.34E-02	2.35E+02	2.85E+02
Cs-134	6.37E-05	1.54E+02	6.63E-01	1.69E+00	3.39E-03	--	--	3.35E-02	4.11E+00	3.00E-02	1.60E+02
Cs-135	--	--	9.01E-03	4.66E-05	--	4.69E-04	--	--	--	--	9.52E-03
Cs-137	1.57E+02	1.39E+04	1.20E+04	6.74E+04	1.65E+03	8.00E+01	1.56E+03	1.95E+03	5.93E+02	1.82E+03	1.01E+05
Eu-152	5.20E-04	--	4.02E-02	1.64E-02	3.14E-03	--	--	5.34E+00	--	8.88E-03	5.41E+00
Eu-154	2.13E-02	1.13E+02	1.18E+02	3.93E+00	1.01E-01	--	--	5.79E+00	1.17E+00	7.20E-01	2.42E+02
Eu-155	1.98E-02	2.61E+02	2.32E-01	1.01E+01	1.42E-02	--	1.11E+00	9.18E-02	--	7.29E-03	2.73E+02

Table 3-6. RH Radionuclides (Ci) on a Site Basis Decayed Through 2007
Continued

Nuclide	ANLE	ANLW (MFC)	BAPL	Hanford	INL	KAPL-S	LANL	ORNL	SNL-A	SRS	Total
Fe-55	1.55E-01	--	--	2.61E-03	3.72E-04	--	--	--	--	--	1.58E-01
Fr-221	2.13E-06	6.93E-11	3.20E-02	4.52E-05	3.72E-04	1.33E-09	3.86E-13	1.42E+00	2.50E-11	2.96E-07	1.45E+00
Fr-223	2.07E-09	1.42E-10	1.54E-03	2.18E-08	3.92E-09	8.96E-10	2.54E-08	5.17E-05	3.09E-10	2.80E-10	1.59E-03
Gd-152	7.29E-17	--	1.47E-16	1.92E-16	1.01E-16	--	--	3.77E-13	--	6.86E-17	3.77E-13
H-3	--	2.05E+02	2.08E+01	1.94E+03	2.17E-05	--	--	--	--	6.25E-02	2.16E+03
Ho-166m	--	--	2.04E-07	--	--	--	--	--	--	--	2.04E-07
I-129	--	--	5.77E-03	2.15E-05	--	4.28E-05	--	1.38E-06	--	4.00E-05	5.87E-03
Kr-81	--	--	1.80E-07	--	--	--	--	--	--	--	1.80E-07
Kr-85	1.15E+00	--	2.03E+02	2.82E+00	1.00E+00	--	--	--	--	7.24E-01	2.09E+02
Mn-54	1.68E-10	1.49E-07	--	4.31E-05	6.11E-08	--	--	--	--	--	4.33E-05
Mo-93	--	--	--	1.82E-04	--	--	--	--	--	--	1.82E-04
Na-22	--	--	--	1.87E-06	--	--	--	--	--	--	1.87E-06
Nb-93m	3.83E-03	--	6.17E-01	1.51E-04	--	7.56E-04	--	--	--	--	6.22E-01
Nb-94	--	--	1.89E-05	--	--	--	--	--	--	--	1.89E-05
Nb-95	--	--	--	8.35E-13	--	--	--	--	--	--	8.35E-13
Nb-95m	--	--	--	2.79E-15	--	--	--	--	--	--	2.79E-15
Ni-59	--	--	--	1.21E-03	--	2.03E-04	--	--	--	2.73E-03	4.14E-03
Ni-63	--	1.05E+01	--	2.90E-03	2.84E+00	2.12E-02	--	--	--	--	1.34E+01
Np-237	6.48E-03	8.96E-04	3.60E-02	3.49E-01	1.32E-02	9.93E-04	1.24E-05	1.53E-02	1.28E-03	1.97E+00	2.39E+00
Np-238	--	9.71E-06	3.38E-05	3.62E-05	1.30E-06	--	--	--	--	9.42E-04	1.02E-03
Np-239	1.21E-04	2.05E-04	2.56E-02	5.01E-01	6.81E-04	6.06E-05	--	8.54E-01	--	1.64E+00	3.03E+00
Np-240m	--	--	--	2.35E-06	--	2.02E-12	--	5.65E-09	--	1.80E-13	2.35E-06
Pa-231	4.07E-07	1.97E-07	1.74E-01	2.54E-05	1.14E-06	1.22E-07	5.50E-06	6.62E-03	1.58E-07	8.53E-08	1.81E-01
Pa-233	6.43E-03	8.87E-04	3.56E-02	3.45E-01	1.31E-02	9.84E-04	1.23E-05	1.51E-02	1.27E-03	1.95E+00	2.37E+00
Pa-234	3.04E-07	1.62E-05	7.92E-08	1.14E-04	8.47E-07	4.74E-10	5.26E-08	2.52E-05	3.20E-07	8.12E-06	1.65E-04
Pa-234m	2.33E-04	1.25E-02	6.09E-05	8.76E-02	6.51E-04	3.65E-07	4.04E-05	1.94E-02	2.46E-04	6.24E-03	1.27E-01
Pb-209	2.13E-06	6.94E-11	3.20E-02	4.53E-05	3.72E-04	1.33E-09	3.86E-13	1.42E+00	2.50E-11	2.96E-07	1.45E+00
Pb-210	5.19E-10	5.29E-10	9.37E-06	2.21E-09	1.25E-10	4.39E-09	6.38E-10	4.93E+00	1.87E-10	1.03E-08	4.93E+00
Pb-211	1.50E-07	1.03E-08	1.12E-01	1.58E-06	2.84E-07	6.50E-08	1.84E-06	3.75E-03	2.24E-08	2.03E-08	1.15E-01
Pb-212	6.31E-15	9.40E-14	8.76E+00	1.84E-05	4.40E-05	3.40E-05	8.24E-15	2.67E+00	6.00E-18	4.28E-04	1.14E+01
Pb-214	2.46E-09	1.31E-08	1.60E-05	1.52E-08	9.45E-10	1.48E-08	2.68E-09	9.80E+00	1.93E-09	5.35E-08	9.80E+00
Pd-107	--	--	2.76E-04	3.02E-06	--	1.96E-05	--	--	--	--	2.99E-04
Pm-146	--	--	3.76E-07	--	--	--	--	--	--	--	3.76E-07
Pm-147	3.13E-02	2.43E+02	1.00E+01	8.51E+00	8.84E-03	1.84E-02	1.04E-01	4.66E-02	2.53E+00	7.06E-02	2.64E+02
Po-210	5.19E-10	5.29E-10	9.18E-06	2.21E-09	1.25E-10	4.39E-09	6.37E-10	4.92E+00	1.87E-10	1.02E-08	4.92E+00
Po-211	4.58E-10	3.14E-11	3.40E-04	4.80E-09	8.65E-10	1.98E-10	5.61E-09	1.14E-05	6.84E-11	6.17E-11	3.52E-04
Po-212	4.03E-15	6.01E-14	5.60E+00	1.17E-05	2.81E-05	2.17E-05	5.26E-15	1.71E+00	3.83E-18	2.74E-04	7.31E+00
Po-213	2.09E-06	6.79E-11	3.13E-02	4.43E-05	3.64E-04	1.30E-09	3.78E-13	1.39E+00	2.45E-11	2.90E-07	1.42E+00
Po-214	2.46E-09	1.31E-08	1.60E-05	1.52E-08	9.45E-10	1.48E-08	2.68E-09	9.80E+00	1.93E-09	5.35E-08	9.80E+00
Po-215	1.50E-07	1.03E-08	1.12E-01	1.58E-06	2.84E-07	6.50E-08	1.84E-06	3.75E-03	2.24E-08	2.03E-08	1.15E-01
Po-216	6.30E-15	9.39E-14	8.75E+00	1.84E-05	4.40E-05	3.39E-05	8.23E-15	2.67E+00	5.99E-18	4.28E-04	1.14E+01
Po-218	2.42E-09	1.29E-08	1.57E-05	1.49E-08	9.29E-10	1.45E-08	2.63E-09	9.64E+00	1.90E-09	5.26E-08	9.64E+00
Pr-144	8.87E-11	1.55E+01	--	2.38E-08	5.04E-11	--	--	2.97E-09	--	4.21E-07	1.55E+01
Pu-236	--	--	8.32E-08	--	--	--	--	--	--	--	8.32E-08

Table 3-6. RH Radionuclides (Ci) on a Site Basis Decayed Through 2007
Continued

Nuclide	ANLE	ANLW (MFC)	BAPL	Hanford	INL	KAPL-S	LANL	ORNL	SNL-A	SRS	Total
Pu-238	3.42E+01	1.08E+01	2.86E+02	1.94E+03	8.95E+01	3.18E+00	1.27E+00	1.06E+02	5.53E+00	1.11E+03	3.58E+03
Pu-239	6.80E+01	8.06E+01	5.02E-01	1.30E+03	5.66E+02	8.82E-03	2.45E+02	1.69E+01	3.86E+00	2.04E+01	2.30E+03
Pu-240	1.49E+01	8.30E+00	5.63E-01	6.42E+02	1.60E+02	2.21E-03	2.53E+00	1.32E+01	5.79E-01	2.07E+01	8.63E+02
Pu-241	9.07E+01	1.86E+01	3.56E+01	9.74E+03	1.97E+03	2.46E-01	2.39E+01	8.40E+01	2.66E-02	9.42E+02	1.29E+04
Pu-242	--	3.77E-04	3.99E-03	1.87E-01	9.01E-01	8.42E-06	1.52E-03	3.46E-02	--	4.99E-02	1.18E+00
Pu-243	--	--	--	--	--	1.72E-13	--	3.48E-10	--	3.42E-08	3.45E-08
Pu-244	--	--	--	2.33E-06	--	2.00E-12	--	5.59E-09	--	1.79E-13	2.33E-06
Ra-223	1.52E-07	1.04E-08	1.13E-01	1.59E-06	2.87E-07	6.57E-08	1.86E-06	3.79E-03	2.27E-08	2.05E-08	1.17E-01
Ra-224	6.29E-15	9.38E-14	8.74E+00	1.83E-05	4.39E-05	3.39E-05	8.22E-15	2.67E+00	5.98E-18	4.27E-04	1.14E+01
Ra-225	2.13E-06	6.94E-11	3.21E-02	4.53E-05	3.73E-04	1.33E-09	3.87E-13	1.42E+00	2.51E-11	2.96E-07	1.45E+00
Ra-226	2.49E-09	1.32E-08	1.62E-05	1.54E-08	9.56E-10	1.49E-08	2.71E-09	9.92E+00	1.95E-09	5.41E-08	9.92E+00
Ra-228	7.44E-15	3.10E-13	3.07E-03	4.49E-06	5.55E-05	5.11E-11	9.71E-15	1.15E-02	1.34E-17	2.17E-13	1.46E-02
Rb-87	--	--	9.68E-07	--	--	--	--	--	--	--	9.68E-07
Rh-106	4.44E-08	--	7.57E-06	3.61E-07	4.25E-06	--	9.39E-08	1.65E-06	--	4.34E-08	1.40E-05
Rn-219	1.50E-07	1.03E-08	1.11E-01	1.57E-06	2.83E-07	6.49E-08	1.84E-06	3.74E-03	2.24E-08	2.02E-08	1.15E-01
Rn-220	6.30E-15	9.40E-14	8.75E+00	1.84E-05	4.40E-05	3.39E-05	8.23E-15	2.67E+00	5.99E-18	4.28E-04	1.14E+01
Rn-222	2.47E-09	1.31E-08	1.60E-05	1.52E-08	9.46E-10	1.48E-08	2.68E-09	9.82E+00	1.93E-09	5.36E-08	9.82E+00
Ru-106	4.48E-08	--	7.65E-06	3.65E-07	4.30E-06	--	9.48E-08	1.66E-06	--	4.38E-08	1.42E-05
Sb-125	4.08E-03	1.64E-03	4.19E-01	2.00E+00	9.03E-04	--	1.10E-01	1.42E-03	--	1.02E-03	2.53E+00
Sb-126	4.72E-04	--	4.61E-03	2.24E-01	--	5.48E-05	--	--	--	3.39E-07	2.29E-01
Sb-126m	3.37E-03	--	3.29E-02	1.60E+00	--	3.91E-04	--	--	--	2.42E-06	1.64E+00
Se-79	--	--	9.19E-02	6.21E-02	--	1.20E-04	--	--	--	9.94E-07	1.54E-01
Sm-146	--	--	2.14E-15	--	--	--	--	--	--	--	2.14E-15
Sm-147	3.61E-09	1.12E-08	1.71E-10	1.02E-09	3.26E-11	1.75E-12	4.16E-09	3.81E-10	8.09E-10	5.19E-11	2.14E-08
Sm-151	7.45E+00	1.37E+01	5.08E+01	2.68E+00	--	1.30E+00	--	--	--	2.92E-01	7.63E+01
Sn-121m	--	--	4.36E-02	5.93E-06	--	3.26E-03	--	--	--	--	4.69E-02
Sn-126	3.37E-03	--	3.30E-02	1.60E+00	--	3.92E-04	--	--	--	2.42E-06	1.64E+00
Sr-90	4.00E+01	1.64E+04	1.18E+04	4.90E+04	1.34E+03	7.60E+01	1.40E+03	1.20E+03	5.89E+02	1.15E+03	8.30E+04
Tc-99	4.12E-02	--	3.02E+00	5.42E+00	--	2.46E-02	--	5.63E-03	--	3.74E-01	8.88E+00
Te-125m	9.88E-04	3.97E-04	1.01E-01	4.84E-01	2.19E-04	--	2.65E-02	3.43E-04	--	2.47E-04	6.14E-01
Th-227	1.48E-07	1.02E-08	1.10E-01	1.55E-06	2.79E-07	6.40E-08	1.81E-06	3.69E-03	2.21E-08	1.99E-08	1.14E-01
Th-228	6.38E-15	9.51E-14	8.85E+00	1.86E-05	4.45E-05	3.43E-05	8.33E-15	2.70E+00	6.06E-18	4.33E-04	1.16E+01
Th-229	2.14E-06	6.95E-11	3.21E-02	4.54E-05	3.73E-04	1.34E-09	3.87E-13	1.42E+00	2.51E-11	2.97E-07	1.45E+00
Th-230	5.29E-07	1.53E-05	1.29E-03	6.81E-06	3.50E-07	1.87E-06	4.53E-07	2.30E-03	9.04E-07	1.34E-05	3.64E-03
Th-231	5.96E-04	4.22E-03	8.76E-03	4.97E-03	2.78E-03	8.30E-05	9.19E-03	2.23E-03	7.38E-04	4.24E-04	3.40E-02
Th-232	1.12E-14	1.47E-12	3.02E-03	1.56E-05	5.54E-05	4.84E-11	1.27E-14	2.32E-02	4.24E-17	9.10E-13	2.63E-02
Th-234	2.34E-04	1.25E-02	6.10E-05	8.77E-02	6.52E-04	3.65E-07	4.05E-05	1.94E-02	2.47E-04	6.25E-03	1.27E-01
Tl-207	1.49E-07	1.03E-08	1.11E-01	1.57E-06	2.82E-07	6.46E-08	1.83E-06	3.73E-03	2.23E-08	2.01E-08	1.15E-01
Tl-208	2.27E-15	3.38E-14	3.15E+00	6.61E-06	1.58E-05	1.22E-05	2.96E-15	9.62E-01	2.16E-18	1.54E-04	4.11E+00
Tl-209	4.69E-08	1.53E-12	7.04E-04	9.95E-07	8.19E-06	2.93E-11	8.50E-15	3.11E-02	5.50E-13	6.51E-09	3.19E-02
U-232	--	--	1.69E+01	3.38E-05	--	3.79E-05	--	2.93E+00	--	5.56E-04	1.98E+01
U-233	7.14E-04	1.92E-07	1.10E+01	4.83E-01	4.18E-01	4.75E-07	5.55E-10	1.98E+01	5.36E-08	2.36E-04	3.17E+01
U-234	3.53E-03	4.24E-01	1.54E+00	1.43E-01	3.37E-01	5.66E-03	1.85E-03	1.11E-01	1.01E-02	1.17E-01	2.69E+00
U-235	6.04E-04	4.28E-03	8.86E-03	5.04E-03	1.46E-02	8.40E-05	9.30E-03	2.26E-03	7.48E-04	4.29E-04	4.62E-02

Table 3-6. RH Radionuclides (Ci) on a Site Basis Decayed Through 2007
Continued

Nuclide	ANLE	ANLW (MFC)	BAPL	Hanford	INL	KAPL-S	LANL	ORNL	SNL-A	SRS	Total
U-236	1.41E-05	7.43E-03	1.01E-01	9.79E-02	5.74E-05	7.97E-04	1.02E-05	1.68E-03	1.72E-07	4.37E-03	2.13E-01
U-237	2.23E-03	4.56E-04	8.73E-04	2.32E-01	2.83E-02	6.05E-06	5.87E-04	2.06E-03	6.52E-07	2.31E-02	2.90E-01
U-238	2.36E-04	1.26E-02	6.16E-05	8.85E-02	2.64E-03	3.69E-07	4.09E-05	1.96E-02	2.49E-04	6.31E-03	1.30E-01
U-240	--	--	--	2.30E-06	--	1.98E-12	--	5.53E-09	--	1.77E-13	2.31E-06
Y-90	3.95E+01	1.62E+04	1.17E+04	4.84E+04	1.33E+03	7.51E+01	1.38E+03	1.18E+03	5.83E+02	1.13E+03	8.21E+04
Y-91	--	1.05E-08	--	--	--	--	--	--	--	--	1.05E-08
Zn-65	--	--	--	4.49E-05	3.86E-08	--	--	3.09E-13	--	--	4.49E-05
Zr-93	5.00E-03	--	7.65E-01	4.12E-04	--	3.01E-03	--	--	--	--	7.74E-01
Zr-95	--	--	--	3.38E-05	--	--	--	--	--	--	3.38E-05
Total	6.43E+02	6.06E+04	4.75E+04	2.45E+05	1.07E+04	3.11E+02	6.07E+03	6.98E+03	2.37E+03	8.37E+03	3.89E+05

Data Source: CID Data Version D.7.00, LANL-CO 2008a.

3.3.2 WIPP Radionuclide Inventory

Four radionuclides, americium (Am)-241, Pu-238, Pu-239, and Pu-241, make up 96% of the total CH-TRU waste activity in this report. Five radionuclides: barium (Ba)-137m, cesium (Cs)-137, Pu-241, strontium (Sr)-90, and yttrium (Y)-90 make up 96% of the total RH-TRU waste activity in this report.

Table 3-7 lists the comprehensive sum of the anticipated activity (curies) of the ten WIPP-tracked CH- and RH-TRU radionuclides reported by the sites and decayed to the end of CY 2007.

Table 3-7. Ten WIPP-Tracked Radionuclides

Nuclide	Total CH Activity (Ci)	Total RH Activity (Ci)
Am-241	4.31E+05	3.91E+03
Cs-137	4.70E+02	1.01E+05
Pu-238	8.09E+05	3.58E+03
Pu-239	4.89E+05	2.30E+03
Pu-240	1.38E+05	8.63E+02
Pu-242	6.98E+01	1.18E+00
Sr-90	4.82E+02	8.30E+04
U-233	1.11E+02	3.17E+01
U-234	9.81E+01	2.69E+00
U-238	2.64E+01	1.30E-01
Total	1.87E+06	1.95E+05

A comparison of the CH-and RH-TRU waste radionuclides with the highest activity in this report to those reported in the ATWIR-2007 (DOE 2008b), are presented in Appendix D. The radionuclides from both reports have been decayed to a common year, 2033 (the proposed closure year of WIPP) to facilitate comparison.

Overall the radionuclide TRU waste inventory activity decreased over that reported in ATWIR-2007. The CH-TRU waste inventory decreased by 4.15×10^5 Ci and the RH-TRU waste inventory decreased by 1.33×10^6 Ci (see Appendix D of this report for details).

4.0 POTENTIAL WIPP TRU WASTE

Potential TRU waste is waste that, at this time, is not slated to be shipped to WIPP because of one or more of the following reasons: insufficient waste information, a TRU determination is needed, a defense determination or other regulatory or physical condition exists that makes the waste unshippable.

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

4.1 Categories of Potential WIPP Transuranic Waste

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

- Non-defense TRU waste — The DOE National Security and Military Applications of Nuclear Energy Authorization Act of 1980 (U.S. Congress 1979) authorized the construction of WIPP to demonstrate the safe disposal of radioactive waste resulting from U. S. defense activities.⁴ Under the LWA (U.S. Congress 1992), Congress restricted WIPP to the disposal of TRU radioactive waste from atomic energy defense activities.⁵ Accordingly, WIPP may not accept non-TRU radioactive waste, and more specifically, non-defense (i.e., commercial) TRU radioactive waste for disposal.
- RH-TRU waste exceeding 23,000 Ci/m³ (23 curies per liter (Ci/l)) averaged over the volume of the RH canister. This limit is mandated by the LWA (U.S. Congress 1992 and 1996).
- RH-TRU waste with dose rates greater than 1000 rem/hr. This limit is mandated by the LWA, which also requires that only 5 percent of the RH-TRU waste emplaced at WIPP may exceed 100 rem per hour (R/hr).
- TRU waste streams with D001 (Ignitable), D002 (Corrosive), and D003 (Reactive) RCRA hazardous waste numbers. This restriction is from the WIPP Hazardous Waste Facility Permit (NMED 1999).
- Waste determined to be low-level waste, mixed low-level waste, high-level waste (HLW), or spent nuclear fuel. This restriction is mandated by the LWA.

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

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

- Total curies of RH-TRU waste shall not exceed 5.1 million curies. This limit is mandated by the LWA.

The following waste categories may eventually become acceptable for disposal at WIPP:

- Unknown. Potential TRU waste may come from TRU waste streams currently declared “unknown” (see Tables 4-1 and 4-2). These TRU wastes have not been characterized adequately to determine the final TRU waste form and/or other significant parameters. If these TRU wastes are characterized and meet the WIPP Waste Acceptance Criteria (DOE 2008c), they will be included in the WIPP TRU waste inventory in the future. Once a waste is characterized, individual containers from that waste stream may be included in the original waste stream where they were first assigned or, depending on data available and similarity to other waste streams may be assigned to other waste streams.
- Pre-1970 buried TRU waste. Several TRU waste sites (LANL, SRS, Hanford, INL, ORNL, and West Valley Demonstration Project) have TRU waste that was buried prior to 1970. INL is currently preparing pre-1970 buried TRU waste for shipment to WIPP as mandated by a federal district court order.⁶ There was an appeal that this waste be left in place, but Judge Lodge (Wasden 2003) upheld the court order and an Agreement to Implement U.S. District Court Order was reached in July 2008. Two waste streams at Hanford Richland Operations (RL618-01 and RL618-07) have been added to potential waste in this report. SRS and ORNL have RCRA caps on pre-1970 buried TRU waste, and this waste will not be excavated or retrieved per the Government Accounting Office (GAO) (GAO 2007).
- Defense determination pending. TRU waste streams are not acceptable at WIPP until they have a defense determination.
- Newly-identified TRU waste. Newly-identified TRU waste not identified in the last TRU waste inventory collection period that has insufficient information.
- Beryllium block TRU waste stream at INL. This waste stream includes beryllium blocks and outer shim control cylinders from the Advanced Test Reactor and may be considered in the future. The radionuclide concentrations are too high to be considered in this report.
- Any TRU waste contaminated with constituents other than those listed in Table II.C.4 of the WIPP Hazardous Waste Facility Permit. This waste requires a permit modification or removal of hazardous waste numbers before shipment.

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

- All waste streams from the Hanford Office of River Protection (Hanford-RP) (tank wastes managed as high-level waste), two sodium-contaminated waste streams at INL, and sludge from Hanford-RL K-Basin knock-out pots — categorized as potential TRU waste based on CBFO correspondence (Moody 2007).
- One new waste stream from Hanford (RL) has been put into the potential waste category because it currently exceeds the limit of 23,000 Ci/m³ set by the WIPP LWA. This waste stream will be re-evaluated before data collection begins for the next annual report.
- Several waste streams from the Advanced Mixed Waste Treatment Plant (AMWTP) are also included in the potential waste stream category because they had no volumes associated with them as of 12/31/2007, but the AMWTP uses these waste streams as identifiers for direct shipments, when necessary, instead of placing them into waste stream IN-BN510, which is the super-compacted waste stream (e.g., in case the super-compactor is down for maintenance and shipments need to be made in order to meet shipping milestones). These waste streams are: IN-BN161, IN-BN211, IN-BN243, IN-BN252, IN-BN296, and IN-BN304 (not shown on Tables 4-1 or 4-2)

Table 4-1 identifies the current CH potential TRU waste streams and Table 4-2 identifies the current RH potential TRU waste streams.

Table 4-1. Potential CH-TRU Waste Streams

Waste Stream ID¹	Final Form Anticipated Payload (m³)	Reason Waste Stream is Potential
BL-Parks	1.6E+01	Needs defense determination and characterization data
BT-T006	5.1E+01	Very large sources will need special packages
IN-W146.699	2.3E+00	These waste streams were first identified in TWBIR Rev. 2, and very little is known about them. Therefore, they will be reported in potential waste until more information becomes available.
IN-W159.1072	1.9E+00	
IN-W219.110	9.4E+00	
IN-W259.552	1.0E+01	
IN-W259.920	2.5E+00	
IN-W322.851	1.9E+00	
IN-W322.952	1.7E+00	
IN-W323.562	1.9E+00	
IN-W323.951	1.5E+00	
IN-W332.661	1.5E+00	
IN-W337.673	2.1E-01	
IN-W337.957	2.1E-01	

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

Waste Stream ID ¹	Final Form Anticipated Payload (m ³)	Reason Waste Stream is Potential
IN-W341.671	2.1E-01	
IN-W341.954	2.1E-01	
IN-W347.818	5.6E+00	
IN-W350.650	2.1E-01	
IN-W350.923	2.1E-01	
IN-W353.859	2.1E-01	
IN-W353.917	2.1E-01	
IN-W358.854	2.1E-01	
IN-W358.855	2.1E-01	
IN-W358.948	2.1E-01	
IN-W365.843	4.2E-01	
IN-W372.832	1.9E+00	
LA-LA238HOR	1.4E+01	
LA-TA-03-17	1.1E+01	Insufficient characterization data
LA-TA-03-21	5.7E+01	Insufficient characterization data
LA-TA-03-23	4.2E+01	Insufficient characterization data
LA-TA-21-18	9.5E+00	Insufficient characterization data
LA-TA-55-52	6.2E-01	Insufficient characterization data
LB-T004	8.3E-01	Insufficient characterization data
MC-W002	2.1E-01	Lithium sealed sources
ND-T001	2.2E+01	Needs Defense Determination
RL618-01	2.5E+02	Insufficient characterization data
RLRFET-01	2.5E+02	Insufficient characterization data
RP-TFC001	4.4E+02	Needs TRU determination
RP-W754	3.2E+02	Needs TRU determination
RP-W755	7.9E+02	Needs TRU determination
SP-T001	8.3E+00	Insufficient characterization data
SP-T002	4.2E+01	Insufficient characterization data
SR-T001-773A-CLAS	1.2E+02	Insufficient characterization data
SR-T001-WSB-1	4.9E+03	Projected waste from facility under construction
SR-T001-WSB-3	1.4E+02	Projected waste from facility under construction
SR-W026-MFFF-1	3.5E+03	Projected waste from facility under construction
SR-W026-PDCF-1	2.1E+03	Projected waste from facility under construction
SR-W026-WSB-2	6.3E+02	Projected waste from facility under construction
SR-W027-221H-HET-B	1.5E+01	Insufficient characterization data

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

Waste Stream ID ¹	Final Form Anticipated Payload (m ³)	Reason Waste Stream is Potential
SR-W027-HBL-Box-B	1.0E+02	Insufficient characterization data
VN-CHT001	3.5E+01	No characterization data at time of inventory
WV-M008	2.1E-01	Needs TRU determination
WV-M010a	2.5E+01	Needs TRU determination
WV-M013	1.7E+00	Needs TRU determination
WV-T004	5.8E+00	Needs TRU determination
WV-T006a	1.2E+03	Needs TRU determination
WV-T017a	1.3E+01	Needs TRU determination
WV-W024a	6.9E+00	Needs TRU determination
WV-Z001	1.4E+03	Needs TRU determination
Grand Total	1.7E+04	

Data Source: CID Data Version D.7.00, LANL-CO 2008a.

¹See Figure 1-1 for site designators.

Table 4-2. Potential RH-TRU Waste Streams

Waste Stream ID ¹	Final Form Anticipated Payload (m ³)	Reason Waste Stream is Potential
AW-IN-TRA-BE-01	3.1E+01	Exceeds the 23,000 Ci/m ³ limit set by the LWA
AW-W018	4.5E+00	Contains reactive sodium – requires treatment to remove reactivity characteristic prior to shipment
AW-W019	8.9E-01	Needs treatment prior to shipment
AW-W020.13	2.5E+01	Exceeds the 23,000 Ci/m ³ limit set by the LWA
AW-W029	1.2E+01	Exceeds the 23,000 Ci/m ³ limit set by the LWA
AW-W048	1.1E+01	Needs characterization data
BL-Parks-A	4.2E-01	Needs defense determination and characterization data
IN-ID-RTC-S5000	3.0E+01	Needs characterization data
IN-NRF-SPC	2.8E+01	Needs characterization data
IN-SBW-01A	6.0E+02	Needs TRU Determination
IN-SBW-01B	8.9E+01	Needs TRU Determination
IN-W169.193	1.5E+01	These waste streams were first identified in TWBIR Rev. 2, and very little is known about them. Therefore, they will be reported in potential waste until more information becomes available.
IN-W197.197	1.6E+01	
IN-W198.204	1.0E+00	
IN-W219.914	1.8E+00	
IN-W245.1035	1.2E+00	

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

Waste Stream ID ¹	Final Form Anticipated Payload (m ³)	Reason Waste Stream is Potential
IN-W247.524	1.0E+00	
IN-W260.566	1.5E+01	
IN-W283.964	4.2E-01	
IN-W317.1029	2.1E+00	
IN-W342.652	3.2E-01	
IN-W342.953	2.1E-01	
IN-W358.949	5.3E+00	
IN-W359.853	6.2E-01	
IN-W360.852	2.1E-01	
IN-W360.912	2.1E-01	
IN-W364.845	8.9E-01	
IN-W372.918	4.5E+00	
OR-W233	2.1E+02	
RL105-09A	4.5E+00	Needs TRU Determination
RL300-08	2.3E+02	Exceeds the 23,000 Ci/m ³ limit set by the LWA
RL618-07	9.5E+02	Insufficient characterization data
RLCH2-08	3.2E+02	Needs TRU Determination
RP-TFC002	1.9E+03	Needs TRU Determination
RP-TFC003	2.6E+02	Needs TRU Determination
RP-W013	4.1E+02	Needs TRU Determination
RP-W016	1.3E+03	Needs TRU Determination
VN-RHT001	1.5E+02	No characterization data at time of inventory
WV-M010b	8.9E-01	Needs a defense determination
WV-T006b	5.3E+02	Needs a defense determination
WV-T017b	5.6E+01	Needs a defense determination
WV-W024b	2.5E+02	Needs a defense determination
Grand Total	7.5E+03	

Data Source: CID Data Version D.7.00, LANL-CO 2008a.

¹See Figure 1-1 for site designators.

As discussed above, these waste streams may become eligible for disposition at WIPP if all of the required information is provided by the site and the waste meets the acceptance criteria in the WIPP WAC.

5.0 SUMMARY

This report is an update of the ATWIR-2007 (DOE 2008b), which documented the total estimated inventory of TRU waste as defined by the TRU waste sites. Like the ATWIR-2007, this report focuses on changes resulting from characterization, improved estimations, continued generation, and WIPP emplacement. The cut-off date for data collection for this report was December 31, 2007.

Since the ATWIR-2007 was issued, 6,827 m³ of CH-TRU waste and 88 m³ of RH-TRU waste have been emplaced at WIPP. This waste has been shipped from Hanford RL, INL, LANL and SRS. As a result of these shipments, more characterization data have been reported by these TRU waste sites and better estimates have been provided for this inventory. The most notable changes resulting from the use of this new information in the inventory have been decreases in the densities of iron-based metal and in the activity of both the CH- and the RH-TRU waste (see Appendix D).

The information in this report was collected from and validated by the TRU waste sites and entered into the CBFO QAPD-compliant CID database. The CID includes estimates for: 1) waste volumes (stored, projected, and emplaced); 2) radionuclides (decayed to a common year of 2007); and 3) waste and packaging material parameters average densities.

This report includes WIPP-bound waste, emplaced waste, potential TRU waste, inventory comparisons, and a historic crosswalk of TRU waste streams in Appendices A, B, C, D, and E, respectively.

This revision includes changes to sites' waste streams from the ATWIR-2007 and CID data version D.6.06. Each TRU waste site validated their data to ensure completeness and accuracy. The inventory team received validated data from each site and then made the changes in the CID.

6.0 GLOSSARY

40 CFR Part 191, Protection of Environment - EPA: Environmental Radiation Protection Standards for Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic 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. Subpart C of 40 CFR Part 191 establishes the requirements that apply to the performance assessments and compliance assessments that will be used to demonstrate compliance with the requirements of the disposal regulations.

Acceptable Knowledge - 40 CFR 194.2 defines Acceptable Knowledge as any information about the process used to generate waste, material inputs to the process, and the time period during which the waste was generated, as well as data resulting from the analysis of waste, conducted prior to or separate from the waste certification process

authorized by EPA's Certification Decision, to show compliance with Condition 3 of the certification decision Appendix A of 40 CFR 194.2.

Anticipated Inventory - As defined in this report, the sum of the total stored and total projected inventory volumes is the anticipated volume.

Buried Waste - TRU waste buried in shallow trenches prior to the 1970 Atomic Energy Commission policy that required TRU waste to be retrievably stored. This waste is left in place for the majority of TRU waste generator sites.

Consultation and Cooperation (C&C) Agreement – The agreement between DOE and the State of New Mexico that limits the volume of RH waste to be emplaced in WIPP to 250,000 cubic feet (ft³) (7079 m³).

Cement - A dry powder made from silica, alumina, lime, iron oxide, and magnesia, which hardens when mixed with water. Used as an ingredient in concrete and also used to solidify liquid wastes, resulting in a homogeneous monolith.

Complexing Agent - See Organic Ligand.

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

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

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

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

Disposal - Emplacement of waste in a manner that assures isolation from the biosphere for the foreseeable future with no intent of retrieval and that requires deliberate action to regain access to the waste. For example, disposal of waste in a mined geologic repository occurs when all of the shafts to the repository area are backfilled and sealed.

Disposal Inventory Volume - The inventory volume defined for WIPP emplacement to be used for performance assessment calculations is the "disposal inventory." The LWA

defines the total amount of TRU waste allowed in the WIPP as 6,200,000 cubic feet (approximately 175,560 cubic meters).

Emplaced Inventory - Waste that has been disposed at the WIPP as of the inventory date (December 31, 2007) for the purposes of this 2008 annual report.

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

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

Mixed TRU Waste - TRU waste that contains both radioactive and hazardous components as defined by the Atomic Energy Act and the RCRA as codified in 40 CFR Part 261.3. The RCRA test phase was removed by Public Law 104-201 in the 1996 Land Withdrawal Act Amendments.

Organic Ligands - Organic molecules that are capable of binding to metals including but not limited to acetate, citrate, oxalate and ethylenediaminetetraacetic acid (EDTA).

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

Payload Container Volume - For the purpose of this document, the payload container volume is the volume that the final form package occupies at the time it is emplaced in the repository. Examples of payload container volume used in this context are ten-drum overpacks (TDOPs) with a volume of 4.50 m³ and RH canister overpacks of three 55-gallon drums with a volume of 0.89 m³.

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

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

Potential Waste Stream - A waste stream that may have regulatory or physical constraints that keep waste from being emplaced in WIPP. Once the constraints for these waste streams are handled, these waste streams may be certified for shipment to WIPP.

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 sites. TRU waste in projected waste streams includes waste from programs that have not come on line at this time as well as waste from ongoing projects.

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

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

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

Retrievably Stored Waste – Stored waste that includes waste stored in buildings or berms with earthen cover since 1970, but does not include waste buried prior to 1970. Retrievably stored waste also includes waste that is stored in underground storage tanks, ponds, and as decontamination and decommissioning material identified for disposal that requires retrieval at the sites.

Scaling - The process for adjusting the CH and RH-TRU waste volumes so that the stored, projected, and emplaced inventories in WIPP apply to the “disposal inventory” or regulatory limits for performance assessment modeling purposes. Only the projected waste stream volumes are scaled.

Stored Inventory - That part of the TRU waste inventory currently in retrievable storage as of the time of the last data cut off date for inventory information. Stored inventory can be in the “current form waste” or “final form waste.”

Supersack - Woven plastic (polypropylene) bags used to contain MgO used in backfill in the WIPP repository. Each supersack contains an average of 4,200 lbs of MgO (DOE 2009).

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

Transuranic (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 including DOE M 435.1-1 and the Land Withdrawal Act. The Land Withdrawal Act definition of transuranic waste is as follows: “Transuranic waste is radioactive waste containing more than 100 nanocuries (3700 becquerels) of alpha-emitting transuranic isotopes per gram of waste, with half lives greater than 20 years, except for: (1) High-level radioactive waste; (2) waste that the Secretary of Energy has determined, with the concurrence of the Administration of the

Environmental Protection Agency, does not need the degree of isolation required by 40 CFR Part 191 disposal regulations; (3) waste that the Nuclear Regulatory Commission has approved for disposal on a case-by-case basis in accordance with 10 CFR Part 61.”

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

Waste Acceptance Criteria (WAC) - The criteria used to determine if waste packages are acceptable for disposal at WIPP. For the purposes of this document, WAC refers to the WIPP WAC.

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

WIPP Waste Stream - A waste stream that is being planned for shipment to WIPP or is currently certified and being shipped to WIPP.

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 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 to demonstrate a practical, long-term solution to a complex problem: the safe disposal in deep geologic repositories of TRU waste resulting from DOE activities.

Waste Material Parameter (WMP) - A waste material that occurs in TRU waste that is an input parameter into one (or more) current PA model(s). As an example, cellulose, plastic, and rubber are monitored as contributors to the generation of gas in WIPP.

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

Waste Stream Profile - A description of a CH-TRU or RH-TRU waste stream destined for shipment to and disposal in WIPP. Waste stream profiles are generated for TRU waste that will be or is currently being shipped to WIPP (waste stream profiles reported in Appendix A) as well as those waste streams that are planned for future shipment once physical or regulatory concerns are addressed (waste stream profiles are reported in Appendix C). The waste profile is presented in tabular format and is intended to provide a summary of the important information about a particular waste stream.

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APPENDIX A: WIPP-Bound Waste

The following waste stream profiles contain information on waste streams that are being considered for shipment to WIPP at this time and are expected to meet the Transuranic Waste Acceptance Criteria for the WIPP (DOE 2008c) as of the inventory date, December 31, 2007. In addition, waste that has already been shipped to WIPP is identified with a waste stream ID ending in “-S”, in this appendix. The volumes for these waste streams are recorded in the “Shipped” category in Appendix A for accounting purposes, as well as in Appendix B: Emplaced, but are not double counted in the final inventory.

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

Argonne National Laboratory – East	AE
Argonne National Laboratory – West (currently MFC)	AW
Bettis Atomic Power Laboratory	BT
Framatome	FR
Idaho National Laboratory	IN
Knolls Atomic Power Laboratory – Schenectady	KA
Knolls Atomic Power Laboratory – Nuclear Fuels Service	KN
Los Alamos National Laboratory	LA
Lawrence Berkeley Laboratory	LB
Lawrence Livermore National Laboratory	LL
U. S. Army Materiel Command	MC
Nevada Test Site	NT
Oak Ridge National Laboratory	OR
Paducah Gaseous Diffusion Plant	PA
Rocky Flats Environmental Technology Site ⁷	RF
Hanford (Richland)	RL
Sandia National Laboratories (Albuquerque)	SA
Savannah River Site	SR

This Appendix includes waste streams that are in the process of being shipped to WIPP (i.e., are partially emplaced).

⁷ Although RFETS waste has been completely shipped to WIPP, the site is still represented in the WIPP-bound waste profiles. All volumes recorded on these profiles are in the “Shipped” category.

Waste Stream ID: **AECHDM-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - East	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-AECHDM	56.6
55-gal Drum Dir Ld w/o Liner	WP-AECHDM	0.2
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-AECHDM	45.0
Shipped Total		101.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	78.91
Aluminum-based Metals/Alloys	1.45
Other Metals	6.32
Other Inorganic Materials	6.55
Cellulosics	5.70
Rubber	11.27
Plastics	41.18
Cements	0.00
Inorganic Matrix	1.94
Organic Matrix	0.91
Soils/gravel	0.11
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.34E-01
Am-243	1.85E-02
Cm-244	1.14E-03
Cs-137	1.74E-02
Np-237	1.20E-03
Pu-238	6.28E-01
Pu-239	8.40E-01
Pu-240	6.35E-01
Pu-241	8.84E-01
Pu-242	2.57E-04
Pu-244	3.26E-19
Sr-90	1.82E-02
Th-229	8.39E-05
Th-230	2.78E-08
Th-232	7.44E-18
U-233	4.13E-04
U-234	7.77E-04
U-235	1.47E-05
U-236	7.53E-08
U-238	4.33E-04

Haz. Waste No(s).

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

No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **AECHHM-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - East	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3110	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-AECHHM	9.4
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-AECHHM	4.5
Shipped Total		13.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	355.56
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.06E+00
Am-243	3.71E-04
Cs-137	1.00E-04
Np-237	1.23E-04
Pu-238	3.21E-01
Pu-239	2.98E+00
Pu-240	1.19E+00
Pu-241	5.55E-13
Pu-242	1.46E-04
Sr-90	1.05E-04
Th-229	2.32E-05
Th-230	1.39E-08
Th-232	1.39E-17
U-233	2.09E-09
U-234	3.88E-04
U-235	7.62E-06
U-236	1.41E-07
U-238	1.94E-04

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **AE-T001**

Appendix A

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - East	Final Waste Form	Combustible	Waste Matrix Code	S5420	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	ANL-E Contact-Handled Mixed Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	5.0	88.8	93.8
Current Form Total	5.0	88.8	93.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	3.5	88.8	92.4
Final Form Total	3.5	88.8	92.4

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.66E-01
Cs-137	2.07E-02
Np-237	4.28E-03
Pu-238	7.45E-02
Pu-239	9.11E-01
Pu-240	5.38E-01
Pu-241	8.19E-01
Pu-242	4.37E-04
Sr-90	1.46E-02
Th-229	1.18E-06
Th-230	1.07E-08
Th-232	3.96E-07
U-233	6.00E-04
U-234	5.88E-05
U-235	1.80E-05
U-236	4.62E-07
U-238	3.18E-04

Haz. Waste No(s).

D005, D006, D007,
D008, D009, D011

TRUCON Code(s)

116/216

Waste Stream Description

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

Waste Stream ID: **AE-T003**

Appendix A

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - East	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3110	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	ANL-E Contact-Handled Mixed Homogenous Solids			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	7.3	2.9	10.2
Current Form Total	7.3	2.9	10.2
Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	6.7	2.9	9.6
Final Form Total	6.7	2.9	9.6

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.52E-01
Cs-137	2.51E-04
Np-237	6.22E-04
Pu-238	4.38E-02
Pu-239	1.24E+00
Pu-240	4.79E-01
Pu-241	1.98E+00
Pu-242	1.34E-05
Sr-90	6.36E-04
Th-229	7.28E-07
Th-230	2.67E-10
Th-232	1.27E-16
U-233	4.09E-04
U-234	2.80E-06
U-235	3.24E-06
U-236	2.70E-07
U-238	7.14E-05

Haz. Waste No(s).

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

TRUCON Code(s)

111/211

Waste Stream Description

Solidified liquid waste from evaporator bottom and research activities. Waste stream identifiers previously referred to as AE-W038, AE-W039 and AE-W040 are now included with waste stream AE-T003.

Waste Stream ID: **AE-T009**

Appendix A

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - East	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	RH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	RH TRU	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
30-gal Drum	10.2	166.0	176.2
Current Form Total	10.2	166.0	176.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	26.7	436.1	462.8
Final Form Total	26.7	436.1	462.8

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.55E-02
Am-243	2.65E-07
Cm-244	1.29E-03
Cs-137	3.39E-01
Np-237	1.40E-05
Pu-238	7.39E-02
Pu-239	1.47E-01
Pu-240	3.21E-02
Pu-241	1.96E-01
Sr-90	8.64E-02
Th-229	4.62E-09
Th-230	1.14E-09
Th-232	2.41E-17
U-233	1.54E-06
U-234	7.63E-06
U-235	1.30E-06
U-236	3.05E-08
U-238	5.10E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s)
325

Waste Stream Description

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

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

Appendix A

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - East	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-MU-W002	4.5
Shipped Total		4.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	7.11
Aluminum-based Metals/Alloys	2.31
Other Metals	0.02
Other Inorganic Materials	2.91
Cellulosics	0.11
Rubber	0.00
Plastics	2.84
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.56E+00
Am-243	2.53E-04
Cs-137	3.71E-07
Np-237	8.57E-04
Pu-239	5.04E-03
Sr-90	3.87E-07
Th-229	2.44E-04
Th-230	7.66E-16
U-233	1.45E-08
U-234	4.26E-11
U-235	1.99E-11
U-238	3.85E-06

Haz. Waste No(s).

D006, D011

No TRUCON Codes Provided

Waste Stream Description

N/A

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

Appendix A

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - West	Final Waste Form	Heterogeneous	Waste Matrix Code	S5440	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	ALHC UPGRADE DECON DEBRIS			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
5-gal Drum	0.0	0.0	0.0
SWB w/ 4 - 55-gal Drums w/o Liners	3.8	0.0	3.8
Current Form Total	3.8	0.0	3.8

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	236.00
Aluminum-based Metals/Alloys	42.00
Other Metals	7.00
Other Inorganic Materials	52.00
Cellulosics	81.00
Rubber	18.00
Plastics	68.00
Cements	296.40
Inorganic Matrix	5.00
Organic Matrix	1.00
Soils/gravel	3.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Cs-137	4.75E-01
Pu-239	4.09E-03
Sr-90	2.35E+00
U-235	5.65E-11

Haz. Waste No(s).

D006, D007, D008

TRUCON Code(s)

125/225

Waste Stream Description

Paint scraping debris from analytical lab hot cell refurbishment. Bags of lead-lined gloves were placed in the solidified CO₂ bead blasting waste drums to fill the void spaces. The leftover gloves were placed in a separate 30-gallon drum. 1710 lbs of waste are in two TRU SWBs; Container numbers MW-S-94-02 AND MW-S-94-03. The SWB contains a mixture of debris and solidified solids (paint dust from bead blasting). The majority of the waste is debris (over 50%) and will be processed at AMWTP as debris.

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

Appendix A

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - West	Final Waste Form	Combustible	Waste Matrix Code	S5311	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	LEAD CONTAMINATED WASTE			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.8	5.4	6.2
Current Form Total	0.8	5.4	6.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	0.8	5.4	6.2
Final Form Total	0.8	5.4	6.2

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.08E-03
Np-237	1.07E-08
Pu-238	3.97E+00
Pu-239	3.26E+00
Pu-240	1.97E-02
Pu-241	1.08E-02
Pu-242	2.48E-07
Th-229	3.12E-10
Th-230	8.64E-09
Th-232	1.74E-18
U-233	3.03E-07
U-234	1.51E-04
U-235	2.12E-06
U-236	6.42E-09
U-238	7.73E-09

Haz. Waste No(s).

D008

TRUCON Code(s)

125/225

Waste Stream Description

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

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

Appendix A

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - West	Final Waste Form	Heterogeneous	Waste Matrix Code	S5420	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	FCF (RH) MISCELLANEOUS TRU WASTE			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Canister - (MFC) o/p 45-gal Drums	0.0	17.7	17.7
Liner - RSWF	1.3	0.0	1.3
Current Form Total	1.3	17.7	19.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid - Dir Ld	1.8	23.1	24.9
Final Form Total	1.8	23.1	24.9

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.16E-01
Am-243	8.32E-06
Cm-244	7.39E-05
Cs-137	2.25E+02
Np-237	2.72E-05
Pu-238	3.62E-01
Pu-239	3.17E+00
Pu-240	3.04E-01
Pu-241	5.57E-01
Pu-242	8.47E-06
Sr-90	2.98E+02
Th-229	2.79E-12
Th-230	6.12E-07
Th-232	5.89E-14
U-233	7.66E-09
U-234	1.70E-02
U-235	6.33E-05
U-236	2.98E-04
U-238	8.91E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)
325

Waste Stream Description

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

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

Appendix A

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - West	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	Analytical Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	ANL-752 TRU WASTE	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	4.8	33.7	38.5
Current Form Total	4.8	33.7	38.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	4.8	33.7	38.5
Final Form Total	4.8	33.7	38.5

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.50E+00
Am-243	8.71E-02
Np-237	1.05E-02
Pu-238	4.03E+00
Pu-239	3.60E+00
Pu-240	8.20E-01
Pu-241	5.87E+00
Pu-242	2.35E-04
Pu-244	5.83E-08
Th-229	2.88E-05
Th-230	3.79E-07
Th-232	2.17E-08
U-233	3.41E-02
U-234	2.21E-03
U-235	7.58E-05
U-236	1.73E-05
U-238	4.24E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

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

Waste Stream ID: **AW-W026**

Appendix A

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - West	Final Waste Form	Heterogeneous	Waste Matrix Code	S5440	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	ALHC Upgrade Decon Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Liner - RSWF	0.2	0.0	0.7
Current Form Total	0.7	0.0	0.7

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

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.38E-01
Cs-137	1.31E-01
Np-237	6.35E-07
Pu-239	2.48E-02
Sr-90	4.65E-01
Th-229	8.46E-15
Th-230	8.63E-16
U-233	1.93E-11
U-234	1.37E-11
U-235	2.56E-06
U-238	3.48E-07

Haz. Waste No(s).

D006, D007, D008

TRUCON Code(s)

325

Waste Stream Description

Waste packaged for WIPP containing remote-handled radioactive cadmium contaminated debris from CH-ANL-242T and remote-handled waste similar to AW-N026.82, solidified to meet WIPP-WAC requirement for particulate immobilization. RSWF Containers SN-161 and T-46. The waste contains a mixture of debris and solidified solids (paint dust from bead blasting) and neutralized/solidified sample waste. The majority of the waste is debris (over 50%) and will be processed as debris.

Waste Stream ID: **AW-W028**

Appendix A

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - West	Final Waste Form	Heterogeneous	Waste Matrix Code	S5410	Handling	RH
Source Cat.	Pollution Control or Waste Treatment Process	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	TRU Waste Used Filters.	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
45-gal Drum	0.3	8.8	9.2
Bin - Metal	3.8	0.0	3.8
Current Form Total	4.1	8.8	13.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid - Dir Ld	1.8	16.0	17.8
Final Form Total	1.8	16.0	17.8

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Cs-137	2.04E-01
Pu-239	2.44E-02
Pu-240	1.28E-03
Sr-90	5.64E-01
Th-230	1.68E-15
Th-232	1.84E-19
U-234	2.66E-11
U-235	1.25E-06
U-236	5.32E-10
U-238	6.76E-07

Haz. Waste No(s).

D006, D007, D008

TRUCON Code(s)

325

Waste Stream Description

This waste stream consists of metal or wood-framed filters. Pre-Filters are 2'x2'x0.5', standard HEPA filters are 2'x2'x1'. Analytical Lab Hot Cell filters are 1'x1'x1'. The filters have screen mesh covering high efficiency filtering media. The concentration of radioisotopes and RCRA metals varies in each filter. These filters were generated from the decontamination of the analytical hot cells in 1993 and 1994, and subsequent hot cell filter changeouts in the Analytical Lab and the Fuel Conditioning Facility.

Waste Stream ID: **AW-W046**

Appendix A

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - West	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	RH
Source Cat.	Pollution Control or Waste Treatment Process	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	FCF RLWS Filters and Resin			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
45-gal Drum	0.9	4.4	5.3
Current Form Total	0.9	4.4	5.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid - Dir Ld	1.8	8.0	9.8
Final Form Total	1.8	8.0	9.8

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.63E-01
Cs-137	8.03E+02
Np-237	2.21E-05
Pu-238	1.77E-01
Pu-239	1.15E-01
Pu-240	7.28E-02
Pu-241	4.81E-01
Pu-242	1.70E-05
Sr-90	8.74E+02
Th-229	4.51E-15
Th-230	2.28E-12
Th-232	5.33E-20
U-233	9.63E-11
U-234	5.07E-07
U-235	2.73E-04
U-236	2.16E-09
U-238	1.06E-03

Haz. Waste No(s).

D006

TRUCON Code(s)

325

Waste Stream Description

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

Waste Stream ID: **AW-W047**

Appendix A

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - West	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	FCF Crucible (Graphite)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
45-gal Drum	0.2	2.2	2.4
Current Form Total	0.2	2.2	2.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid - Dir Ld	0.9	4.5	5.3
Final Form Total	0.9	4.5	5.3

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Cs-137	7.24E+01
Pu-239	4.13E-04
Sr-90	7.85E+01
U-235	1.63E-12

No Hazardous Waste Numbers Provided

TRUCON Code(s)
315

Waste Stream Description

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

Waste Stream ID: **AW-W049**

Appendix A

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - West	Final Waste Form	Heterogeneous	Waste Matrix Code	S5440	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	FMF glovebox waste	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.4	32.4	32.9
Current Form Total	0.4	32.4	32.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	0.4	32.4	32.9
Final Form Total	0.4	32.4	32.9

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.07E+00
Pu-238	5.63E-02
Pu-239	3.12E-01
Pu-240	2.23E-01
Pu-241	3.55E+00
Pu-242	8.22E-05
U-235	7.63E-06
U-238	8.37E-08

No Hazardous Waste Numbers Provided

TRUCON Code(s) 125/225

Waste Stream Description

Fuel Manufacturing Facility experiment glovebox waste.

Waste Stream ID: **BT-T001**

Appendix A

TRU Waste Inventory Profile Report

Site	Bettis Atomic Power Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5420	Handling	RH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Irradiated TRU material waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
HIP	0.0	0.0	0.0
Hot Cell	1.9	0.0	1.9
Current Form Total	2.0	0.0	2.0

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

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.18E+00
Am-243	7.30E-03
Cm-244	1.54E-01
Cs-137	3.36E+03
Np-237	1.01E-02
Pu-238	8.03E+01
Pu-239	1.41E-01
Pu-240	1.58E-01
Pu-241	9.99E+00
Pu-242	1.12E-03
Sr-90	3.32E+03
Th-229	9.02E-03
Th-230	3.64E-04
Th-232	8.49E-04
U-233	3.08E+00
U-234	4.31E-01
U-235	2.49E-03
U-236	2.83E-02
U-238	1.73E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)
325

Waste Stream Description

Specimen processing fines, material, and debris.

Waste Stream ID: **BT-T002**

Appendix A

TRU Waste Inventory Profile Report

Site	Bettis Atomic Power Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5111	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Contaminated Piping System	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Piping	18.9	0.0	18.9
Current Form Total	18.9	0.0	18.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/o Liner	18.9	0.0	18.9
Final Form Total	18.9	0.0	18.9

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.10E-04
Am-243	2.13E-06
Cm-244	1.12E-04
Cs-137	1.02E+00
Np-237	3.03E-06
Pu-238	4.81E-02
Pu-239	3.90E-05
Pu-240	7.97E-05
Pu-241	6.70E-03
Pu-242	6.20E-07
Pu-244	3.56E-14
Sr-90	1.02E+00
Th-229	1.52E-14
Th-230	4.83E-09
Th-232	6.98E-15
U-233	6.46E-11
U-234	1.08E-04
U-235	1.40E-06
U-236	1.60E-05
U-238	6.46E-09

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

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

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **BT-T007**

Appendix A

TRU Waste Inventory Profile Report

Site	Bettis Atomic Power Laboratory	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5111	Handling	RH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Irradiated TRU material waste and debris.			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Hot Cell	0.1	0.0	0.1
Current Form Total	0.1	0.0	0.1

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

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.18E+00
Am-243	7.30E-03
Cm-244	1.54E-01
Cs-137	3.36E+03
Np-237	1.01E-02
Pu-238	8.03E+01
Pu-239	1.41E-01
Pu-240	1.58E-01
Pu-241	9.99E+00
Pu-242	1.12E-03
Sr-90	3.32E+03
Th-229	9.02E-03
Th-230	3.64E-04
Th-232	8.49E-04
U-233	3.08E+00
U-234	4.31E-01
U-235	2.49E-03
U-236	2.83E-02
U-238	1.73E-05

Haz. Waste No(s).

D008

TRUCON Code(s)

317

Waste Stream Description

Hazardous Metal debris (Lead)

Waste Stream ID: **FR-MOX-MT02**

Appendix A

TRU Waste Inventory Profile Report

Site	Framatome	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Pending Determination	Inventory Date	12/31/2007		
Stream Name	Framatome MOX Fuel Plant D&D TRU Heterogeneous Mixed Debris Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
85-gal Drum w/ 1 - 55-gal Drum w/o Liner	0.6	0.0	0.6
Current Form Total	0.6	0.0	0.6

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	305.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	56.00
Rubber	21.00
Plastics	4.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.61E-06
Np-237	2.13E-11
Pu-238	1.25E-06
Pu-239	7.20E-07
Pu-240	4.29E-07
Pu-241	2.21E-05
Pu-242	1.00E-08
Th-229	5.76E-19
Th-230	7.88E-15
Th-232	1.39E-22
U-233	9.11E-16
U-234	8.13E-11
U-235	1.49E-14
U-236	2.67E-13
U-238	3.17E-17

Haz. Waste No(s).

D008

TRUCON Code(s)

125/225

Waste Stream Description

This waste is from the D&D of a Mixed Oxide fuel fabrication plant. Wastes consist of discarded equipment (motors, grinders, scales, etc.) and decontamination wastes (rags, protective clothing, sweeps, etc.) from the D&D of the facility. The 6 M container includes 85 mixed oxide pellets.

Waste Stream ID: **FR-MOX-T01**

Appendix A

TRU Waste Inventory Profile Report

Site	Framatome	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Pending Determination	Inventory Date	12/31/2007		
Stream Name	Framatome MOX Fuel Plant D&D TRU Heterogeneous Debris Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
85-gal Drum w/ 1 - 55-gal Drum w/o Liner	8.4	0.0	8.4
85-gal Drum w/ Dot 6-M	0.3	0.0	0.3
Current Form Total	8.7	0.0	8.7

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	305.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	56.00
Rubber	21.00
Plastics	4.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.61E-06
Np-237	2.13E-11
Pu-238	1.25E-06
Pu-239	7.20E-07
Pu-240	4.29E-07
Pu-241	2.21E-05
Pu-242	1.00E-08
Th-229	5.76E-19
Th-230	7.88E-15
Th-232	1.39E-22
U-233	9.11E-16
U-234	8.13E-11
U-235	1.49E-14
U-236	2.67E-13
U-238	3.17E-17

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

This waste is from the D&D of a Mixed Oxide fuel fabrication plant. Wastes consist of discarded equipment (motors, grinders, scales, etc.) and decontamination wastes (rags, protective clothing, sweeps, etc.) from the D&D of the facility. The 6 M container includes 85 mixed oxide pellets.

Waste Stream ID: **BN004-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3150	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-BN004	7.1
SWB w/ 4 - 55-gal Drums w/ Liners	WP-BN004	245.7
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-BN004	81.0
Shipped Total		333.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.02
Aluminum-based Metals/Alloys	0.00
Other Metals	0.01
Other Inorganic Materials	2.44
Cellulosics	0.03
Rubber	0.01
Plastics	1.83
Cements	0.00
Inorganic Matrix	488.47
Organic Matrix	1.44
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.08E+00
Cm-244	5.02E-03
Cs-137	7.39E-06
Np-237	5.15E-04
Pu-238	1.49E-01
Pu-239	3.63E+00
Pu-240	8.23E-01
Pu-241	6.83E+00
Pu-242	7.47E-05
Sr-90	1.25E-05
Th-229	1.37E-07
Th-230	5.91E-10
Th-232	2.41E-18
U-233	7.28E-04
U-234	3.33E-05
U-235	7.47E-06
U-236	4.88E-08
U-238	5.76E-06

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **BN161-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-BN161	0.6
SWB w/ 4 - 55-gal Drums w/ Liners	WP-BN161	3.8
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-BN161	54.0
Shipped Total		58.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.41
Aluminum-based Metals/Alloys	0.00
Other Metals	0.08
Other Inorganic Materials	135.39
Cellulosics	10.80
Rubber	0.00
Plastics	2.19
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.34E-01
Np-237	1.04E-05
Pu-238	1.68E-01
Pu-239	4.00E+00
Pu-240	9.15E-01
Pu-241	6.30E+00
Pu-242	7.38E-05
Th-229	8.20E-15
Th-230	1.48E-11
Th-232	2.68E-18
U-233	8.82E-11
U-234	1.30E-06
U-235	5.46E-08
U-236	5.42E-08
U-238	2.23E-14

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **BN211-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-BN211	8.7
SWB w/ 4 - 55-gal Drums w/ Liners	WP-BN211	54.8
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-BN211	459.0
Shipped Total		522.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.30
Aluminum-based Metals/Alloys	1.80
Other Metals	0.41
Other Inorganic Materials	77.01
Cellulosics	26.02
Rubber	0.02
Plastics	4.13
Cements	0.00
Inorganic Matrix	0.28
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.22E-01
Am-243	9.80E-09
Cs-137	2.61E-09
Np-237	4.88E-05
Pu-238	1.68E-01
Pu-239	3.96E+00
Pu-240	9.14E-01
Pu-241	6.06E+00
Pu-242	7.63E-05
Sr-90	4.42E-09
Th-229	1.09E-08
Th-230	1.07E-10
Th-232	2.68E-18
U-233	5.82E-05
U-234	6.45E-06
U-235	1.21E-06
U-236	5.42E-08
U-238	8.80E-09

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **BN243-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5122	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-BN243	2.9
SWB w/ 4 - 55-gal Drums w/ Liners	WP-BN243	7.6
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-BN243	139.5
Shipped Total		150.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.05
Aluminum-based Metals/Alloys	0.00
Other Metals	4.29
Other Inorganic Materials	93.81
Cellulosics	0.09
Rubber	0.14
Plastics	14.44
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.71E-01
Cm-244	8.38E-03
Cs-137	9.24E-10
Np-237	1.76E-05
Pu-238	3.76E-02
Pu-239	7.89E-01
Pu-240	1.77E-01
Pu-241	1.26E+00
Pu-242	1.77E-05
Sr-90	1.56E-09
Th-229	1.43E-14
Th-230	1.11E-10
Th-232	5.20E-19
U-233	1.52E-10
U-234	6.26E-06
U-235	1.61E-06
U-236	1.05E-08
U-238	5.33E-15

Haz. Waste No(s).

D005, D008, D009,
D022, D028, D029,
F001, F002, F005No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **BN252-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5311	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-BN252	16.6
SWB w/ 4 - 55-gal Drums w/ Liners	WP-BN252	58.6
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-BN252	103.5
Shipped Total		178.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.03
Aluminum-based Metals/Alloys	0.00
Other Metals	30.92
Other Inorganic Materials	2.38
Cellulosics	0.11
Rubber	237.57
Plastics	1.54
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.00E+00
Cs-137	2.44E-09
Np-237	3.43E-04
Pu-238	2.23E-01
Pu-239	6.36E+00
Pu-240	1.37E+00
Pu-241	1.25E+01
Pu-242	1.48E-04
Sr-90	3.88E-09
Th-229	2.80E-13
Th-230	6.03E-11
Th-232	4.00E-18
U-233	2.99E-09
U-234	3.99E-06
U-235	1.32E-06
U-236	8.11E-08
U-238	4.48E-14

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **BN296-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Lead/Cadmium Metal Waste	Waste Matrix Code	S5112	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-BN296	32.0
SWB w/ 4 - 55-gal Drums w/ Liners	WP-BN296	28.4
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-BN296	414.0
Shipped Total		474.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	81.20
Aluminum-based Metals/Alloys	0.39
Other Metals	100.88
Other Inorganic Materials	3.05
Cellulosics	2.81
Rubber	0.62
Plastics	1.55
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.45E+00
Cm-244	2.52E-03
Cs-137	1.92E-08
Np-237	8.31E-05
Pu-238	1.80E-01
Pu-239	3.75E+00
Pu-240	8.35E-01
Pu-241	5.63E+00
Pu-242	8.42E-05
Sr-90	3.44E-08
Th-229	2.23E-09
Th-230	4.55E-11
Th-232	2.44E-18
U-233	1.19E-05
U-234	3.04E-06
U-235	2.11E-03
U-236	4.95E-08
U-238	1.42E-06

Haz. Waste No(s).

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

No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **BN304-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-BN304	4.8
SWB w/ 4 - 55-gal Drums w/ Liners	WP-BN304	20.8
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-BN304	279.0
Shipped Total		304.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	17.05
Aluminum-based Metals/Alloys	0.03
Other Metals	24.82
Other Inorganic Materials	4.74
Cellulosics	5.09
Rubber	8.27
Plastics	6.55
Cements	0.00
Inorganic Matrix	0.01
Organic Matrix	0.00
Soils/gravel	0.09
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.77E-01
Cs-137	1.36E-06
Np-237	7.92E-06
Pu-238	5.05E+01
Pu-239	1.00E-01
Pu-240	7.54E-02
Pu-241	8.19E-01
Pu-242	6.37E-05
Sr-90	2.76E-06
Th-229	6.42E-15
Th-230	2.73E-09
Th-232	2.21E-19
U-233	6.86E-11
U-234	2.96E-04
U-235	1.42E-07
U-236	4.47E-09
U-238	7.84E-05

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **BN510-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
100-gal Drum Dir Ld w/o Liner	WP-BN510	4064.8
Shipped Total		4064.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	371.03
Aluminum-based Metals/Alloys	2.13
Other Metals	3.77
Other Inorganic Materials	19.66
Cellulosics	154.15
Rubber	9.34
Plastics	151.85
Cements	0.00
Inorganic Matrix	0.03
Organic Matrix	0.09
Soils/gravel	0.02
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.58E-01
Cs-137	1.16E-07
Np-237	1.49E-05
Pu-238	1.60E-01
Pu-239	1.52E+00
Pu-240	3.28E-01
Pu-241	2.48E+00
Pu-242	2.93E-05
Sr-90	1.94E-07
Th-229	3.99E-10
Th-230	2.27E-09
Th-232	2.40E-19
U-233	4.25E-06
U-234	2.53E-04
U-235	2.47E-04
U-236	9.72E-09
U-238	6.34E-06

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **BN835-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3113	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-BN835	18.7
SWB w/ 4 - 55-gal Drums w/ Liners	WP-BN835	15.1
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-BN835	994.5
Shipped Total		1028.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.02
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.70
Cellulosics	0.91
Rubber	0.01
Plastics	0.55
Cements	0.00
Inorganic Matrix	239.18
Organic Matrix	0.08
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.98E-02
Cs-137	8.67E-08
Np-237	6.13E-06
Pu-238	1.67E+00
Pu-239	3.30E-03
Pu-240	2.12E-03
Pu-241	3.70E-02
Pu-242	2.14E-06
Sr-90	1.51E-07
Th-229	5.00E-15
Th-230	8.67E-11
Th-232	6.21E-21
U-233	5.33E-11
U-234	9.59E-06
U-235	1.37E-10
U-236	1.26E-10
U-238	2.08E-07

Haz. Waste No(s).

D007, D008, D009,
F001, F002No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **BN836-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3121	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-BN836	43.9
SWB w/ 4 - 55-gal Drums w/ Liners	WP-BN836	1625.4
Shipped Total		1669.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.01
Other Inorganic Materials	0.11
Cellulosics	0.09
Rubber	0.00
Plastics	0.19
Cements	0.00
Inorganic Matrix	552.27
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.38E-03
Cs-137	2.06E-07
Np-237	1.30E-06
Pu-238	1.07E+00
Pu-239	1.62E-03
Pu-240	1.11E-03
Pu-241	5.28E-03
Pu-242	1.27E-06
Sr-90	3.38E-07
Th-229	2.67E-16
Th-230	1.51E-11
Th-232	8.11E-22
U-233	5.69E-12
U-234	3.20E-06
U-235	1.96E-08
U-236	3.28E-11
U-238	8.04E-09

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **BNINW216-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3121	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-BNINW216	142.9
SWB w/ 4 - 55-gal Drums w/ Liners	WP-BNINW216	759.8
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-BNINW216	3564.0
Shipped Total		4466.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.03
Aluminum-based Metals/Alloys	0.00
Other Metals	0.06
Other Inorganic Materials	5.04
Cellulosics	0.01
Rubber	0.02
Plastics	0.49
Cements	0.00
Inorganic Matrix	394.36
Organic Matrix	0.28
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.70E+00
Cs-137	2.01E-08
Np-237	7.78E-05
Pu-238	3.92E-02
Pu-239	3.84E-01
Pu-240	9.74E-02
Pu-241	1.10E+00
Pu-242	5.12E-05
Sr-90	3.28E-08
Th-229	6.12E-14
Th-230	7.12E-10
Th-232	2.85E-19
U-233	6.59E-10
U-234	3.97E-05
U-235	7.06E-06
U-236	5.77E-09
U-238	4.06E-04

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **BNINW218-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3121	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
SWB w/ 4 - 55-gal Drums w/ Liners	WP-BNINW218	39.7
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-BNINW218	409.5
Shipped Total		449.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.03
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	33.65
Cellulosics	0.01
Rubber	0.01
Plastics	2.88
Cements	0.00
Inorganic Matrix	347.69
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.47E-02
Cs-137	2.27E-08
Np-237	5.81E-04
Pu-238	5.07E-03
Pu-239	9.99E-02
Pu-240	2.06E-02
Pu-241	1.98E-01
Pu-242	3.01E-06
Sr-90	3.70E-08
Th-229	1.07E-12
Th-230	1.01E-09
Th-232	1.36E-19
U-233	7.60E-09
U-234	3.73E-05
U-235	3.98E-06
U-236	1.83E-09
U-238	3.15E-04

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **ID-ANLE-S5000-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	RH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	WP-ID-ANLE-S5000	82.8
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	WP-ID-ANLE-S5000	5.3
Shipped Total		88.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	92.02
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.72E-01
Cs-137	3.30E+00
Pu-238	9.28E-02
Pu-239	3.32E-01
Pu-240	1.75E-01
Pu-241	2.71E+00
Pu-242	9.99E-03
Sr-90	2.48E+00
U-233	8.65E-04
U-234	1.07E-03
U-235	3.80E-05
U-238	6.43E-06

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3111	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

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

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.95E-01
Np-237	9.06E-06
Pu-238	1.18E-01
Pu-239	3.52E+00
Pu-240	8.08E-01
Pu-241	5.01E+00
Pu-242	6.47E-05
Th-229	7.16E-15
Th-230	6.07E-12
Th-232	2.37E-18
U-233	7.70E-11
U-234	6.74E-07
U-235	6.94E-09
U-236	4.79E-08
U-238	1.95E-14

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Organics	Waste Matrix Code	S3114	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
SWB w/ 4 - 55-gal Drums w/ Liners	WP-ID-RF-S3114	35.9
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-ID-RF-S3114	238.5
Shipped Total		274.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.08
Aluminum-based Metals/Alloys	0.00
Other Metals	2.20
Other Inorganic Materials	4.08
Cellulosics	0.07
Rubber	1.71
Plastics	1.28
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	356.77
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.57E-02
Cs-137	1.70E-08
Np-237	1.06E-06
Pu-238	5.64E-03
Pu-239	1.39E-01
Pu-240	3.03E-02
Pu-241	2.77E-01
Pu-242	2.92E-06
Sr-90	2.79E-08
Th-229	2.14E-16
Th-230	4.61E-11
Th-232	2.22E-20
U-233	4.58E-12
U-234	5.13E-06
U-235	1.42E-07
U-236	8.99E-10
U-238	1.01E-05

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3150	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-ID-RF-S3150-A	91.1
SWB w/ 4 - 55-gal Drums w/ Liners	WP-ID-RF-S3150-A	92.6
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-ID-RF-S3150-A	18.0
Shipped Total		201.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.01
Aluminum-based Metals/Alloys	0.00
Other Metals	21.17
Other Inorganic Materials	4.29
Cellulosics	0.00
Rubber	1.93
Plastics	3.23
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	666.31
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.84E-01
Cs-137	8.76E-08
Np-237	8.61E-06
Pu-238	3.48E-02
Pu-239	7.55E-01
Pu-240	1.66E-01
Pu-241	1.60E+00
Pu-242	1.41E-05
Sr-90	1.49E-07
Th-229	6.98E-15
Th-230	5.02E-08
Th-232	4.86E-19
U-233	7.45E-11
U-234	2.79E-03
U-235	4.87E-07
U-236	9.84E-09
U-238	9.14E-07

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5100	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-ID-RF-S5100-A	162.7
SWB w/ 4 - 55-gal Drums w/ Liners	WP-ID-RF-S5100-A	7.6
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-ID-RF-S5100-A	445.5
Shipped Total		615.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.03
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	122.34
Cellulosics	15.01
Rubber	0.01
Plastics	8.66
Cements	0.00
Inorganic Matrix	0.99
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.30E-01
Cs-137	2.18E-08
Np-237	2.40E-06
Pu-238	3.15E-02
Pu-239	9.49E-01
Pu-240	2.00E-01
Pu-241	1.21E+00
Pu-242	1.71E-05
Sr-90	3.32E-08
Th-229	3.15E-10
Th-230	6.00E-11
Th-232	5.86E-19
U-233	1.68E-06
U-234	3.43E-06
U-235	8.94E-08
U-236	1.19E-08
U-238	7.31E-09

Haz. Waste No(s).

D008, D009, D022,
F001, F002, F005No TRUCON
Codes Provided

Waste Stream Description

N/A

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5126	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-ID-RF-S5126	79.9
55-gal Drum Dir Ld w/o Liner	WP-ID-RF-S5126	0.4
SWB w/ 4 - 55-gal Drums w/ Liners	WP-ID-RF-S5126	7.6
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-ID-RF-S5126	144.0
Shipped Total		231.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.48
Aluminum-based Metals/Alloys	0.00
Other Metals	0.03
Other Inorganic Materials	239.38
Cellulosics	5.59
Rubber	0.05
Plastics	4.80
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.71E-01
Cs-137	4.21E-03
Np-237	1.14E-05
Pu-238	1.32E-01
Pu-239	3.63E+00
Pu-240	8.46E-01
Pu-241	6.39E+00
Pu-242	7.74E-05
Sr-90	8.50E-08
Th-229	8.82E-08
Th-230	6.48E-10
Th-232	6.19E-19
U-233	9.41E-04
U-234	7.23E-05
U-235	5.62E-08
U-236	2.51E-08
U-238	6.87E-06

Haz. Waste No(s).

D008, D029, F001,
F002, F005No TRUCON
Codes Provided

Waste Stream Description

N/A

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5300	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
SWB w/ 4 - 55-gal Drums w/ Liners	WP-ID-RF-S5300-A	60.5
SWB w/ 4 - 55-gal Drums w/o Liners	WP-ID-RF-S5300-A	1.9
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-ID-RF-S5300-A	2025.0
TDOP w/ 10 - 55-gal Drums w/o Liners	WP-ID-RF-S5300-A	4.5
Shipped Total		2091.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	4.41
Aluminum-based Metals/Alloys	0.23
Other Metals	0.43
Other Inorganic Materials	6.69
Cellulosics	54.41
Rubber	5.35
Plastics	51.74
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.01
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.86E-02
Am-243	8.19E-12
Cm-244	2.44E-04
Cs-137	8.88E-09
Np-237	1.81E-06
Pu-238	3.45E-03
Pu-239	1.04E-01
Pu-240	2.33E-02
Pu-241	1.59E-01
Pu-242	2.46E-05
Sr-90	1.24E-08
Th-229	1.33E-08
Th-230	9.69E-11
Th-232	1.71E-20
U-233	1.42E-04
U-234	1.08E-05
U-235	2.83E-07
U-236	6.91E-10
U-238	4.09E-07

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **ID-SDA-DEBRIS-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-ID-SDA-DEBRIS	33.5
Shipped Total		33.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.32
Aluminum-based Metals/Alloys	2.80
Other Metals	0.00
Other Inorganic Materials	322.39
Cellulosics	30.63
Rubber	0.12
Plastics	12.59
Cements	0.00
Inorganic Matrix	0.35
Organic Matrix	0.00
Soils/gravel	4.16
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.07E-01
Cs-137	1.98E-07
Np-237	1.11E-05
Pu-238	1.54E-01
Pu-239	3.34E+00
Pu-240	7.65E-01
Pu-241	4.07E+00
Pu-242	6.85E-05
Sr-90	2.36E-07
Th-229	1.46E-08
Th-230	1.53E-09
Th-232	5.60E-19
U-233	1.55E-04
U-234	1.71E-04
U-235	4.51E-06
U-236	2.27E-08
U-238	6.17E-05

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	RH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	RH-TRU Debris Waste From ANL-E Stored at the INL			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
30-gal Drum	36.2	0.0	36.2
Current Form Total	36.2	0.0	36.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	95.2	0.0	95.2
Final Form Total	95.2	0.0	95.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	43.40
Aluminum-based Metals/Alloys	10.40
Other Metals	15.70
Other Inorganic Materials	10.40
Cellulosics	13.83
Rubber	3.45
Plastics	15.70
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.46
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

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

Haz. Waste No(s).

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

TRUCON Code(s)

321, 322, 325

Waste Stream Description

This waste stream was generated at Argonne National Laboratory-East (ANL-E). This waste was generated during post irradiation examinations operations conducted in the ANL-E Alpha Gamma Hot Cell Facility (AGHCF) and K-1 and K-2 cells in the M-Wing hot cell Facility

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	RH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	RH-TRU Debris From Materials and Fuels Complex at the INL.			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	16.90
Aluminum-based Metals/Alloys	0.09
Other Metals	0.09
Other Inorganic Materials	40.20
Cellulosics	12.40
Rubber	0.09
Plastics	24.30
Cements	0.00
Inorganic Matrix	5.80
Organic Matrix	5.80
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Cs-137	1.99E-01
Pu-239	1.30E+00
Pu-240	2.76E-02
Th-230	2.83E-16
Th-232	7.29E-18
U-234	3.31E-12
U-235	7.82E-07
U-236	1.55E-08
U-238	6.18E-08

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

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

Waste Stream ID: **IN-BN004**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3150	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Special Setups Waste	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	288.7	0.0	288.7
Box - Misc	3.2	0.0	3.2
Current Form Total	291.9	0.0	291.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	13.7	0.0	13.7
SWB w/ 4 - 55-gal Drums w/ Liners	476.3	0.0	476.3
TDOP w/ 10 - 55-gal Drums w/ Liners	157.5	0.0	157.5
Final Form Total	647.5	0.0	647.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.06
Aluminum-based Metals/Alloys	0.00
Other Metals	0.03
Other Inorganic Materials	2.20
Cellulosics	0.02
Rubber	0.01
Plastics	0.21
Cements	290.00
Inorganic Matrix	180.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	214.43
Packaging Material, Plastic	16.93
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.62E-01
Cs-137	5.38E-06
Np-237	3.27E-04
Pu-238	1.09E-01
Pu-239	2.65E+00
Pu-240	5.99E-01
Pu-241	5.48E+00
Pu-242	5.38E-05
Sr-90	5.92E-06
U-234	1.92E-05
U-235	5.29E-06
U-238	4.04E-08

Haz. Waste No(s).

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

TRUCON Code(s)

111/211

Waste Stream Description

IN-BN004 (Special Setups) waste was generated from a waste treatment process (predominately laboratory waste) generated in support of plutonium operations at RFETS. Resins and electrochemical milling sludges were also solidified with the liquid waste. This waste stream is comprised of solidified waste assigned IDC ID-RF-004 and ID-RF-802. Special Setups consists of waste >50% by volume inorganic solidified waste. Specifically, small quantities of liquids solidified in large quantities of cement.

Waste Stream ID: **IN-BN222**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3150	Handling	CH
Source Cat.	Pollution Control or Waste Treatment Process	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Miscellaneous Cemented Waste				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	122.7	0.0	122.7
Current Form Total	122.7	0.0	122.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
TDOP w/ 10 - 55-gal Drums w/ Liners	265.5	0.0	265.5
Final Form Total	265.5	0.0	265.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	4.40
Aluminum-based Metals/Alloys	0.00
Other Metals	0.13
Other Inorganic Materials	1.80
Cellulosics	0.04
Rubber	0.04
Plastics	12.00
Cements	87.00
Inorganic Matrix	100.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	231.80
Packaging Material, Plastic	17.10
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.23E-01
Np-237	8.12E-07
Pu-238	7.65E-02
Pu-239	2.41E+00
Pu-240	5.39E-01
Pu-241	5.35E+00
Pu-242	5.92E-05
Th-229	6.24E-07
Th-230	1.39E-09
Th-232	9.86E-18
U-233	1.33E-03
U-234	3.15E-05
U-235	3.69E-06
U-236	7.99E-08
U-238	9.90E-04

Haz. Waste No(s).

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

TRUCON Code(s)

111/211, 114/214

Waste Stream Description

The miscellaneous cemented waste is comprised of solidified homogeneous solid wastes generated from the RFETS plutonium recovery operations. The IN-BN222 miscellaneous cemented waste incorporates IDCs ID-RF-292, ID-RF-807b/696, ID-RF-806, ID-RF-818, ID-RF-820, and ID-RF-823 and consists of waste >50% by volume solidified homogeneous solids, i.e., particulate or sludge waste immobilized with cement and cured into a solidified form.

Waste Stream ID: **IN-BN311**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Process Heels				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	12.3	0.0	12.3
Current Form Total	12.3	0.0	12.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	12.3	0.0	12.3
Final Form Total	12.3	0.0	12.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	11.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.37
Other Inorganic Materials	100.00
Cellulosics	0.00
Rubber	0.00
Plastics	22.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.50E+00
Np-237	1.33E-05
Pu-238	9.53E-01
Pu-239	3.09E+01
Pu-240	6.87E+00
Pu-241	7.27E+01
Pu-242	8.63E-04
Th-229	1.84E-05
Th-230	3.21E-09
Th-232	1.26E-16
U-233	3.93E-02
U-234	7.82E-05
U-235	1.07E-05
U-236	1.02E-06
U-238	3.90E-04

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

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

Waste Stream ID: **IN-BN409**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Salt Waste	Waste Matrix Code	S3141	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Chloride Salts	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	16.4	0.0	16.4
Current Form Total	16.4	0.0	16.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	16.4	0.0	16.4
Final Form Total	16.4	0.0	16.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	12.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.65
Other Inorganic Materials	110.00
Cellulosics	0.79
Rubber	0.00
Plastics	6.30
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.63E+01
Np-237	1.23E-04
Pu-238	2.86E+00
Pu-239	6.78E+01
Pu-240	1.55E+01
Pu-241	1.31E+02
Pu-242	1.14E-03
Th-229	2.05E-13
Th-230	9.38E-10
Th-232	2.84E-16
U-233	1.31E-09
U-234	4.15E-05
U-235	3.34E-07
U-236	2.30E-06
U-238	8.60E-13

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

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

Waste Stream ID: **IN-BN421**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3111	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Uncemented Ash/Soot	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	30.8	0.0	30.8
Current Form Total	30.8	0.0	30.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	30.8	0.0	30.8
Final Form Total	30.8	0.0	30.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	6.10
Aluminum-based Metals/Alloys	0.00
Other Metals	0.13
Other Inorganic Materials	120.00
Cellulosics	0.00
Rubber	0.00
Plastics	16.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.62E+00
Np-237	5.59E-06
Pu-238	1.12E+00
Pu-239	2.11E+01
Pu-240	4.82E+00
Pu-241	4.09E+01
Pu-242	4.43E-04
Th-229	3.95E-07
Th-230	5.72E-09
Th-232	8.82E-17
U-233	8.43E-04
U-234	1.35E-04
U-235	2.52E-05
U-236	7.14E-07
U-238	6.92E-05

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at the RFETS, includes ash and soot generated in the Building 771 plutonium recovery incinerator. This waste stream is comprised of IDCs ID-RF-420, ID-RF-421, and ID-RF-422

Waste Stream ID: **IN-BN432**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Organics	Waste Matrix Code	S3211	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Homogeneous Resin Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	67.4	0.0	67.4
Current Form Total	67.4	0.0	67.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	67.4	0.0	67.4
Final Form Total	67.4	0.0	67.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.80
Aluminum-based Metals/Alloys	0.00
Other Metals	0.23
Other Inorganic Materials	3.10
Cellulosics	0.12
Rubber	0.00
Plastics	14.00
Cements	78.00
Inorganic Matrix	0.00
Organic Matrix	91.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.81E+00
Np-237	2.80E-06
Pu-238	2.61E-01
Pu-239	8.41E+00
Pu-240	1.88E+00
Pu-241	1.97E+01
Pu-242	2.31E-04
Th-229	1.59E-06
Th-230	6.34E-10
Th-232	3.44E-17
U-233	3.40E-03
U-234	1.60E-05
U-235	2.90E-06
U-236	2.79E-07
U-238	1.03E-05

Haz. Waste No(s).

D008, F001, F002

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at the RFETS, consists of leached, spent anion and cation exchange resins that were cemented by mixing Portland cement, water, and washed resin into a slurry. This waste stream is comprised of IDCs ID-RF-432, and ID-RF-822

Waste Stream ID: **IN-BN510**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SUPERCOMPACTED DEBRIS WASTE			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	7470.9	0.0	7470.9
Bin - Misc	1781.5	0.0	1781.5
Box - Misc	20614.5	0.0	20614.5
Current Form Total	29867.0	0.0	29867.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
100-gal Drum Dir Ld w/o Liner	11223.7	0.0	11223.7
Final Form Total	11223.7	0.0	11223.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	380.00
Aluminum-based Metals/Alloys	2.00
Other Metals	3.70
Other Inorganic Materials	20.00
Cellulosics	150.00
Rubber	9.00
Plastics	150.00
Cements	0.00
Inorganic Matrix	0.03
Organic Matrix	0.08
Soils/gravel	0.02
Vitrified	0.00
Packaging Material, Steel	113.70
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.21E-01
Cs-137	9.50E-08
Np-237	8.39E-06
Pu-238	1.38E-01
Pu-239	1.39E+00
Pu-240	2.99E-01
Pu-241	2.34E+00
Pu-242	2.60E-05
Sr-90	1.04E-07
U-234	4.39E-06
U-235	1.38E-06
U-238	5.59E-06

Haz. Waste No(s).

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

TRUCON Code(s)

121/221

Waste Stream Description

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

Waste Stream ID: **IN-BN835**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3113	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Solidified Acid/Caustic Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	51.8	0.0	51.8
Current Form Total	51.8	0.0	51.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.1	0.0	2.1
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
TDOP w/ 10 - 55-gal Drums w/ Liners	108.0	0.0	108.0
Final Form Total	112.0	0.0	112.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.02
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.06
Cellulosics	5.30
Rubber	0.02
Plastics	0.25
Cements	0.00
Inorganic Matrix	230.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	229.57
Packaging Material, Plastic	17.46
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.57E-02
Cs-137	6.34E-08
Np-237	4.48E-06
Pu-238	1.25E+00
Pu-239	2.36E-03
Pu-240	1.50E-03
Pu-241	6.33E-03
Pu-242	1.45E-06
Sr-90	6.97E-08
U-234	1.69E-08
U-235	8.78E-11
U-238	1.47E-07

Haz. Waste No(s).

D007, D008, D009,
F001, F002

TRUCON Code(s)

111/211

Waste Stream Description

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

Waste Stream ID: **IN-BN836**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3121	Handling	CH
Source Cat.	Pollution Control or Waste Treatment Process	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Cemented Sludge	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	109.6	0.0	109.6
Current Form Total	109.6	0.0	109.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	6.2	0.0	6.2
SWB w/ 4 - 55-gal Drums w/ Liners	234.4	0.0	234.4
Final Form Total	240.6	0.0	240.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.01
Other Inorganic Materials	0.23
Cellulosics	0.11
Rubber	0.00
Plastics	0.05
Cements	240.00
Inorganic Matrix	310.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	209.02
Packaging Material, Plastic	16.84
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.42E-04
Cs-137	1.43E-07
Np-237	8.74E-07
Pu-238	1.73E-01
Pu-239	2.59E-04
Pu-240	1.77E-04
Pu-241	2.34E-04
Pu-242	2.03E-07
Sr-90	1.58E-07
U-234	9.26E-08
U-235	1.30E-08
U-238	5.24E-09

Haz. Waste No(s).

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

TRUCON Code(s)

111/211

Waste Stream Description

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

Waste Stream ID: **IN-BNINW216**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	CH
Source Cat.	Pollution Control or Waste Treatment Process	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	First/Second Stage Sludge	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2434.0	0.0	2434.0
Box - Misc	25.4	0.0	25.4
Current Form Total	2459.4	0.0	2459.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	175.3	0.0	175.3
SWB w/ 4 - 55-gal Drums w/ Liners	935.6	0.0	935.6
TDOP w/ 10 - 55-gal Drums w/ Liners	4374.0	0.0	4374.0
Final Form Total	5484.9	0.0	5484.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.98
Aluminum-based Metals/Alloys	0.00
Other Metals	0.06
Other Inorganic Materials	4.00
Cellulosics	0.02
Rubber	0.02
Plastics	0.33
Cements	46.00
Inorganic Matrix	340.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	225.04
Packaging Material, Plastic	17.60
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.58E+00
Cs-137	1.35E-08
Np-237	5.04E-05
Pu-238	2.35E-02
Pu-239	2.62E-01
Pu-240	6.42E-02
Pu-241	7.79E-01
Pu-242	2.04E-05
Sr-90	1.48E-08
U-234	2.30E-05
U-235	4.79E-06
U-238	1.24E-04

Haz. Waste No(s).

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

TRUCON Code(s)

111/211, 132/232

Waste Stream Description

IN-BNINW216 (aqueous sludge wastes from Building 774) were generated from a carrier precipitation and immobilization process (sludge mixed with diatomite and Portland cement) The First/Second Sludge waste stream is comprised of IDCs ID-RF-001, ID-RF-002, and ID-RF-800. The First/Second Sludge waste stream consists of >50% by volume secondary sludge or filter cake from wastewater treatment processes or heavy metal sludges from recovery processes.

Two waste matrix codes have been assigned to this waste stream because the immobilization process for this waste stream was changed in 1986. Prior to 1986 the first/second stage sludge was placed into a drum with Portland cement. The excess liquid was immobilized but a solid monolith was not formed. Subsequent to 1986 the sludge was co-fed into a drum with a diatomite and Portland cement mixture, which formed a solid monolith after curing.

Waste Stream ID: **IN-BNINW218**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Building 374 Sludge	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	226.1	0.0	226.1
Current Form Total	226.1	0.0	226.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB w/ 4 - 55-gal Drums w/ Liners	51.0	0.0	51.0
TDOP w/ 10 - 55-gal Drums w/ Liners	522.0	0.0	522.0
Final Form Total	573.0	0.0	573.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.70
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	21.00
Cellulosics	0.00
Rubber	0.01
Plastics	1.90
Cements	21.00
Inorganic Matrix	310.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	229.96
Packaging Material, Plastic	17.03
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.36E-02
Cs-137	1.53E-08
Np-237	2.21E-04
Pu-238	2.89E-03
Pu-239	6.71E-02
Pu-240	1.35E-02
Pu-241	1.49E-01
Pu-242	1.86E-06
Sr-90	1.69E-08
U-234	2.15E-05
U-235	2.67E-06
U-238	2.13E-04

Haz. Waste No(s).

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

TRUCON Code(s)

111/211

Waste Stream Description

The Building 374 Sludge waste stream (BNINW218) consists of drums containing Building 374 dry sludge (IDC 007), solidified direct cementation process sludge (IDC 803), or Building 374 solidified by-pass sludge (IDC 807). The aqueous sludge wastes from Building 374 were generated from a carrier precipitation and immobilization process.

Two waste matrix codes have been assigned to this waste stream because the cementation immobilization process for this waste stream was changed in the 1986-1987 timeframe. The immobilization process at other times involved mixing the sludge with Portland cement or a Portland cement and diatomite mixture. The feed streams to the process did not change over time.

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Soils	Waste Matrix Code	S4000	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Glovebox Excavator Method Project Soils and Sludge			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.49E-01
Np-237	5.82E-07
Pu-238	4.73E-03
Pu-239	2.18E-01
Pu-240	5.00E-02
Pu-241	2.23E-01
Pu-242	2.57E-06
Th-229	6.19E-16
Th-230	9.86E-13
Th-232	5.86E-19
U-233	4.95E-12
U-234	5.45E-08
U-235	8.60E-10
U-236	5.93E-09
U-238	1.55E-15

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

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

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Glovebox Excavator Method Project Heterogeneous Debris.			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.49E-01
Np-237	5.82E-07
Pu-238	4.73E-03
Pu-239	2.18E-01
Pu-240	5.00E-02
Pu-241	2.23E-01
Pu-242	2.57E-06
Th-229	6.19E-16
Th-230	9.86E-13
Th-232	5.86E-19
U-233	4.95E-12
U-234	5.45E-08
U-235	8.60E-10
U-236	5.93E-09
U-238	1.55E-15

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

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

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3000	Handling	RH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Solidified Waste Sludge from Bettis Atomic Power Lab.			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
HFEF-5 RH Insert	0.3	0.0	0.3
Current Form Total	0.3	0.0	0.3
Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	1.8	0.0	1.8
Final Form Total	1.8	0.0	1.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	91.82
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.09
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	37.52
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.02E-03
Am-243	3.87E-04
Cs-137	2.58E+01
Np-237	4.08E-04
Pu-238	3.25E+00
Pu-239	3.47E-03
Pu-240	3.50E-03
Pu-242	3.38E-05
Sr-90	2.51E+01
Th-229	1.42E-04
Th-230	1.66E-08
Th-232	8.30E-06
U-233	7.99E-02
U-234	1.89E-04
U-235	4.48E-05
U-236	1.98E-09
U-238	9.69E-14

Haz. Waste No(s).

D007, D008

No TRUCON Codes Provided

Waste Stream Description

This waste stream inadvertently left out from reporting during 2006 data call, however was reported in 2002 data call. It was previously included in TWBIR Revision 2 (DOE-CAO-95-1121, December 1995). The inventory reported here represents best available information on this waste stream. It consists of 2 inserts (12 in Dia x 6 ft tall). Each insert will be repackaged into 2-55 gallon drums and 3-55 gallon drums will be placed in a RH TRU Removable Lid Canister. This waste consists of two inserts that contain solidified sludge from sectioning, drilling and grinding from metalographic and dissolution process. Concrete was used as the immobilizing matrix. This waste was shipped from BETTIS in 53 small containers to ANL-W and was repackaged at ANL-W prior to transporting to RWMC for interim storage.

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	RH-TRU Debris From Materials and Fuels Complex at the INL.			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
HFEF-5 RH Insert	3.9	0.0	3.9
Current Form Total	3.9	0.0	3.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	16.9	0.0	16.9
Final Form Total	16.9	0.0	16.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	220.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	20.00
Cellulosics	15.00
Rubber	0.00
Plastics	15.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Cs-137	3.00E+01
Np-237	1.39E-06
Pu-239	3.82E-01
Pu-240	1.48E-01
Sr-90	2.81E+01
Th-229	6.94E-06
Th-230	1.78E-13
Th-232	2.40E-06
U-233	3.90E-03
U-234	2.08E-09
U-235	1.54E-04
U-236	8.33E-08
U-238	3.89E-05

Haz. Waste No(s).

D008

No TRUCON Codes Provided

Waste Stream Description

This waste stream inadvertently left out from reporting during 2006 data call, however was reported in 2002 data call. It was previously included in TWBIR Revision 2 (DOE-CAO-95-1121, December 1995). The inventory reported here represents best available information on this waste stream. It consists of 28 inserts (12 in Diax6 ft tall). Each insert will be repackaged into 2-55 gallon drums and 3-55-gallon drums will be placed in a RH TRU Removable Lid Canister.

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Organics	Waste Matrix Code	S3114	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Organic Setups				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1716.6	0.0	1716.6
Current Form Total	1716.6	0.0	1716.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	497.1	0.0	497.1
TDOP w/ 10 - 55-gal Drums w/ Liners	3303.0	0.0	3303.0
Final Form Total	3800.1	0.0	3800.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.07
Aluminum-based Metals/Alloys	0.00
Other Metals	2.09
Other Inorganic Materials	3.87
Cellulosics	0.06
Rubber	1.62
Plastics	1.21
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	338.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	221.56
Packaging Material, Plastic	15.02
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.24E-02
Cs-137	1.65E-08
Np-237	9.86E-07
Pu-238	5.38E-03
Pu-239	1.32E-01
Pu-240	2.87E-02
Pu-241	2.75E-01
Pu-242	2.76E-06
Sr-90	2.70E-08
U-234	4.84E-06
U-235	1.34E-07
U-238	9.55E-06

Haz. Waste No(s).

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

TRUCON Code(s)

112/212, 154

Waste Stream Description

Waste Stream ID-RF-3114 consists of various organic liquids that were immobilized to form a grease or paste -like material. The organic liquids were primarily a mixture of oils and chlorinated solvents. This waste consists of > 50% by volume solidified organic liquids

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Organics	Waste Matrix Code	S3150	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Organic and Sludge Immobilization System Waste	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	38.5	0.0	38.5
Current Form Total	38.5	0.0	38.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	25.2	0.0	25.2
SWB w/ 4 - 55-gal Drums w/ Liners	26.5	0.0	26.5
TDOP w/ 10 - 55-gal Drums w/ Liners	4.5	0.0	4.5
Final Form Total	56.1	0.0	56.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.01
Aluminum-based Metals/Alloys	0.00
Other Metals	21.00
Other Inorganic Materials	4.27
Cellulosics	0.00
Rubber	1.92
Plastics	3.21
Cements	2.69
Inorganic Matrix	0.00
Organic Matrix	663.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	176.75
Packaging Material, Plastic	25.65
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.78E-01
Cs-137	9.12E-08
Np-237	8.44E-06
Pu-238	3.51E-02
Pu-239	7.51E-01
Pu-240	1.65E-01
Pu-241	1.75E+00
Pu-242	1.40E-05
Sr-90	1.56E-07
U-234	2.78E-03
U-235	4.83E-07
U-238	9.09E-07

Haz. Waste No(s).

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

TRUCON Code(s)

112/212, 154

Waste Stream Description

Waste Stream ID-RF-3150A consists of various organic liquids that were immobilized into a solid monolith by the Organic and Sludge Immobilization System (OASIS). The organic liquids were primarily a mixture of oils and chlorinated solvents. This waste consists of > 50% by volume solidified organic liquids

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5100	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Raschig Rings	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	97.3	0.0	97.3
Current Form Total	97.3	0.0	97.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	42.6	0.0	42.6
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
TDOP w/ 10 - 55-gal Drums w/ Liners	117.0	0.0	117.0
Final Form Total	161.5	0.0	161.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.03
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	117.00
Cellulosics	14.30
Rubber	0.01
Plastics	8.27
Cements	0.00
Inorganic Matrix	0.95
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	204.90
Packaging Material, Plastic	22.34
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.17E-01
Cs-137	2.18E-08
Np-237	2.16E-06
Pu-238	3.06E-02
Pu-239	9.07E-01
Pu-240	1.91E-01
Pu-241	1.27E+00
Pu-242	1.65E-05
Sr-90	3.33E-08
U-233	1.60E-06
U-234	3.10E-06
U-235	8.36E-08
U-238	6.98E-09

Haz. Waste No(s).

D008, D009, D022,
F001, F002, F005

TRUCON Code(s)

125/225

Waste Stream Description

Waste stream IN-ID-RF-S5100 is comprised of Raschig ring waste assigned IDC ID-RF-441 and ID-RF-442. Raschig rings are borosilicate glass rings used to maintain subcritical conditions in fissile solution storage tanks that were not say by dimension. This waste consists of >50% by volume Raschig Rings

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Graphite	Waste Matrix Code	S5126	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Graphite Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	116.9	0.0	116.9
Current Form Total	116.9	0.0	116.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	62.4	0.0	62.4
SWB w/ 4 - 55-gal Drums w/ Liners	5.7	0.0	5.7
TDOP w/ 10 - 55-gal Drums w/ Liners	112.5	0.0	112.5
Final Form Total	180.6	0.0	180.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.46
Aluminum-based Metals/Alloys	0.00
Other Metals	0.03
Other Inorganic Materials	230.00
Cellulosics	5.37
Rubber	0.05
Plastics	4.61
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	196.25
Packaging Material, Plastic	23.95
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.36E-01
Cs-137	4.15E-03
Np-237	1.08E-05
Pu-238	1.28E-01
Pu-239	3.49E+00
Pu-240	8.13E-01
Pu-241	6.44E+00
Pu-242	7.44E-05
Sr-90	8.37E-08
U-233	9.04E-04
U-234	6.91E-05
U-235	5.06E-08
U-238	6.60E-06

Haz. Waste No(s).

D008, D029, F001,
F002, F005

TRUCON Code(s)

115/215, 154

Waste Stream Description

Graphite wastes (ID-RF-S5126) are comprised of graphite generated by production, recovery, laboratory, size reduction, and research and development activities associated with RFETS plutonium operations. ID-RF-S5126 contains more than 50% (by volume) inorganic nonmetal debris.

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Combustible	Waste Matrix Code	S5300	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combustibles and Plastics	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	4204.7	0.0	4204.7
Current Form Total	4204.7	0.0	4204.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB w/ 4 - 55-gal Drums w/ Liners	272.2	0.0	272.2
TDOP w/ 10 - 55-gal Drums w/ Liners	8851.5	0.0	8851.5
Final Form Total	9123.7	0.0	9123.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	4.15
Aluminum-based Metals/Alloys	0.22
Other Metals	0.40
Other Inorganic Materials	6.30
Cellulosics	51.20
Rubber	5.03
Plastics	48.70
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.01
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	231.18
Packaging Material, Plastic	17.08
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.61E-02
Am-243	7.71E-12
Cm-244	2.39E-04
Cs-137	8.55E-09
Np-237	1.69E-06
Pu-238	3.27E-03
Pu-239	9.76E-02
Pu-240	2.20E-02
Pu-241	8.28E-01
Pu-242	2.31E-05
Sr-90	1.19E-08
U-233	1.34E-04
U-234	1.01E-05
U-235	2.66E-07
U-238	3.85E-07

Haz. Waste No(s).

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

TRUCON Code(s)

116/216, 154

Waste Stream Description

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

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	ICP Retrieved Debris Waste (Filters/Graphite)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	566.4	0.0	566.4
Box - Misc	881.1	0.0	881.1
Current Form Total	1447.5	0.0	1447.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	790.4	0.0	790.4
SWB Dir Ld w/ Liner	1512.0	0.0	1512.0
Final Form Total	2302.4	0.0	2302.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	3.25
Aluminum-based Metals/Alloys	3.72
Other Metals	0.00
Other Inorganic Materials	956.00
Cellulosics	627.00
Rubber	1.78
Plastics	58.90
Cements	0.07
Inorganic Matrix	1.54
Organic Matrix	2.20
Soils/gravel	20.90
Vitrified	0.00
Packaging Material, Steel	145.71
Packaging Material, Plastic	13.49
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.69E-01
Am-243	2.40E-03
Cs-137	2.04E-07
Np-237	9.20E-06
Pu-238	1.13E-01
Pu-239	2.74E+00
Pu-240	6.22E-01
Pu-241	3.43E+00
Pu-242	1.63E-04
Sr-90	2.34E-07
U-233	8.02E-05
U-234	1.04E-03
U-235	2.73E-06
U-236	5.13E-05
U-238	4.62E-05

Haz. Waste No(s).

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

TRUCON Code(s)

112/212, 122/222, 127/227

Waste Stream Description

Pre-1970 buried waste retrieved for the Idaho Completion Project

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3900	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	ICP Retrieved Sludge Waste (Inorganic/Organic Sludge/Roaster Oxide)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	3468.4	0.0	3468.4
Current Form Total	3468.4	0.0	3468.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	4554.6	0.0	4554.6
Final Form Total	4554.6	0.0	4554.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.77
Aluminum-based Metals/Alloys	0.00
Other Metals	0.06
Other Inorganic Materials	43.30
Cellulosics	0.57
Rubber	0.17
Plastics	7.06
Cements	0.59
Inorganic Matrix	503.00
Organic Matrix	593.00
Soils/gravel	1.61
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.58E+00
Am-243	2.40E-03
Cs-137	1.25E-07
Np-237	7.99E-05
Pu-238	2.02E-02
Pu-239	5.42E-01
Pu-240	1.22E-01
Pu-241	1.16E+00
Pu-242	1.98E-05
Sr-90	1.38E-07
U-233	2.71E-05
U-234	2.24E-04
U-235	5.59E-06
U-236	5.13E-05
U-238	5.38E-04

Haz. Waste No(s).

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

TRUCON Code(s)

112/212, 122/222,
127/227

Waste Stream Description

Pre-1970 buried waste retrieved for the Idaho Completion Project

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Soils	Waste Matrix Code	S4200	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	ICP Retrieved Soils				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	537.1	0.0	537.1
Current Form Total	537.1	0.0	537.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	665.2	0.0	665.2
Final Form Total	665.2	0.0	665.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.77
Aluminum-based Metals/Alloys	0.06
Other Metals	0.24
Other Inorganic Materials	44.00
Cellulosics	25.20
Rubber	0.22
Plastics	12.90
Cements	0.74
Inorganic Matrix	10.00
Organic Matrix	2.17
Soils/gravel	1120.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.88E-01
Am-243	2.40E-03
Cs-137	7.82E-07
Np-237	1.18E-05
Pu-238	2.59E-02
Pu-239	6.61E-01
Pu-240	1.50E-01
Pu-241	1.04E+00
Pu-242	2.20E-05
Sr-90	8.75E-07
Th-232	1.69E-09
U-234	1.70E-04
U-235	1.62E-04
U-236	5.13E-05
U-238	3.29E-04

Haz. Waste No(s).

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

TRUCON Code(s)

112/212, 122/222, 127/227

Waste Stream Description

Pre-1970 buried waste retrieved for the Idaho Completion Project

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	RH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Solidified Fuel Sludge	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	111.95
Aluminum-based Metals/Alloys	0.00
Other Metals	160.11
Other Inorganic Materials	30.74
Cellulosics	0.00
Rubber	0.00
Plastics	13.58
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.68E+00
Cs-137	3.46E+00
Np-237	9.80E-06
Pu-238	1.88E+00
Pu-239	2.72E-01
Pu-240	3.14E-01
Pu-241	1.71E+01
Pu-242	1.13E-03
Sr-90	2.51E+00
Th-229	3.31E-13
Th-230	2.36E-08
Th-232	1.94E-16
U-233	4.57E-10
U-234	1.74E-04
U-235	9.67E-06
U-236	2.70E-07
U-238	4.94E-12

Haz. Waste No(s).

D008

No TRUCON Codes Provided

Waste Stream Description

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

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

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	RH TRU Debris Waste from the Naval Reactor Facility			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
30-gal Drum	3.1	0.0	3.1
Current Form Total	3.1	0.0	3.1

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	3.59
Aluminum-based Metals/Alloys	0.00
Other Metals	21.52
Other Inorganic Materials	1.08
Cellulosics	2.15
Rubber	1.43
Plastics	1.79
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.34E-03
Np-237	7.52E-09
Pu-238	2.88E-02
Pu-239	4.05E-04
Pu-240	4.37E-04
Pu-241	1.45E-02
Pu-242	1.45E-06
Th-229	2.35E-16
Th-230	3.34E-10
Th-232	2.51E-19
U-233	3.37E-13
U-234	2.56E-06
U-235	5.92E-06
U-236	3.63E-10
U-238	6.13E-15

Haz. Waste No(s).

D008, F002

No TRUCON
Codes Provided

Waste Stream Description

"This waste stream consists of 27 debris waste drums generated from examination of fuel in Alpha box at the Expended Core Facility (ECF) of the Naval Reactor Facility (NRF). Each drum contains either one or two poly bottles that contain mostly combustible waste."

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3000	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Stored RH TRU Sludge Waste From Reactor Technology Complex at the Idaho National Laboratory			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	12.60
Aluminum-based Metals/Alloys	0.22
Other Metals	0.22
Other Inorganic Materials	0.22
Cellulosics	0.22
Rubber	0.49
Plastics	0.22
Cements	0.00
Inorganic Matrix	233.00
Organic Matrix	0.22
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.06E+01
Np-237	5.92E-05
Pu-238	1.10E+01
Th-229	1.17E-12
Th-230	4.45E-08
U-233	2.19E-09
U-234	5.69E-04

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of 10 drums of waste generated from removal of sludge from wastewater storage tanks utilized in the storage and handling of Reactor Technology Complex radioactive waste water.

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5300	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Stored RH TRU Organic Debris From Reactor Technology Complex at the Idaho National Laboratory			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.9	0.0	2.9
Current Form Total	2.9	0.0	2.9

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.91
Aluminum-based Metals/Alloys	0.34
Other Metals	0.34
Other Inorganic Materials	0.34
Cellulosics	0.34
Rubber	0.34
Plastics	29.60
Cements	0.00
Inorganic Matrix	0.34
Organic Matrix	351.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.50E-02
Cm-244	2.70E-03
Cs-137	4.67E-02
Np-237	1.49E-07
Pu-238	3.22E-02
Pu-239	9.38E-04
Pu-240	4.81E-06
Sr-90	4.26E-01
Th-229	5.69E-07
Th-230	1.66E-08
Th-232	2.23E-22
U-233	4.67E-04
U-234	1.42E-04
U-235	1.20E-11
U-236	1.00E-12

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of 14 drums of RH TRU organic debris waste resulting from removal of resin from ion-exchange columns utilized in the handling of RTC radioactive waste water.

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

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

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.31E+00
Np-237	2.02E-06
Pu-238	2.76E-01
Pu-239	8.21E+00
Pu-240	1.86E+00
Pu-241	1.63E+01
Pu-242	1.84E-04
Th-229	3.27E-15
Th-230	8.06E-10
Th-232	3.40E-17
U-233	2.11E-11
U-234	1.99E-05
U-235	4.62E-06
U-236	2.75E-07
U-238	2.90E-07

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3113	Handling	CH
Source Cat.	Source Unknown	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	OIL-DRI RESIDUE FROM INCINERATOR:			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
TDOP w/ 10 - 55-gal Drums w/ Liners	9.0	0.0	9.0
Final Form Total	9.2	0.0	9.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	205.58
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	208.08
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	229.52
Packaging Material, Plastic	17.55
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.92E-01
Np-237	1.99E-06
Pu-238	2.37E-01
Pu-239	7.57E+00
Pu-240	1.67E+00
Pu-241	1.31E+01
Pu-242	3.68E-04
Th-229	2.43E-14
Th-230	1.08E-09
Th-232	3.96E-16
U-233	5.54E-11
U-234	1.30E-05
U-235	1.34E-07
U-236	8.90E-07
U-238	1.00E-12

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

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

Organic content should be less than 14 lb/ft³. No sludges or free liquids should be present. The Oil-Dri should meet WIPP immobilization standards. No explosive or pyrophoric materials should be in this waste.

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

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

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5330	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

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

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.43E-01
Np-237	3.79E-07
Pu-238	3.43E-02
Pu-239	1.03E+00
Pu-240	2.30E-01
Pu-241	2.27E+00
Pu-242	3.09E-05
Th-229	6.19E-16
Th-230	7.10E-10
Th-232	4.20E-18
U-233	3.99E-12
U-234	1.60E-05
U-235	3.78E-06
U-236	3.40E-08
U-238	2.29E-07

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3120	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	LAUNDRY SLUDGE	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	13.2	0.0	13.2
TDOP w/ 10 - 55-gal Drums w/ Liners	63.0	0.0	63.0
Final Form Total	76.2	0.0	76.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	2.96
Other Inorganic Materials	30.25
Cellulosics	30.25
Rubber	0.00
Plastics	8.18
Cements	268.45
Inorganic Matrix	402.68
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	218.21
Packaging Material, Plastic	14.34
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.90E-02
Np-237	1.31E-07
Pu-238	1.04E-02
Pu-239	3.39E-01
Pu-240	7.68E-02
Pu-241	8.62E-01
Pu-242	5.54E-06
Th-229	1.61E-15
Th-230	4.73E-11
Th-232	1.83E-17
U-233	3.65E-12
U-234	5.71E-07
U-235	6.02E-09
U-236	4.11E-08
U-238	1.50E-14

Haz. Waste No(s).

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

TRUCON Code(s)

111/211

Waste Stream Description

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

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

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3120	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	BLDG 776 PROCESS SLUDGE:			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	24.6	0.0	24.6
TDOP w/ 10 - 55-gal Drums w/ Liners	117.0	0.0	117.0
Final Form Total	141.6	0.0	141.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	1.46
Other Inorganic Materials	15.79
Cellulosics	6.62
Rubber	0.00
Plastics	4.10
Cements	193.25
Inorganic Matrix	289.87
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	218.21
Packaging Material, Plastic	14.34
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.86E-02
Np-237	1.30E-07
Pu-238	1.54E-02
Pu-239	4.94E-01
Pu-240	1.09E-01
Pu-241	8.53E-01
Pu-242	2.01E-05
Th-229	1.59E-15
Th-230	7.02E-11
Th-232	2.58E-17
U-233	3.61E-12
U-234	8.48E-07
U-235	8.77E-09
U-236	5.81E-08
U-238	5.46E-14

Haz. Waste No(s).

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

TRUCON Code(s)

111/211

Waste Stream Description

This waste is from Rocky Flats and consists of sludge from floor drains in a Pu process facility that have been cemented in portland. The cement is described as a poor grade. Also may be laundry sludges, material contents given are for an organic laundry sludge.

Waste Stream ID: **INW198.001-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5310	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-INW198.001	49.1
Shipped Total		49.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.17
Aluminum-based Metals/Alloys	0.00
Other Metals	2.55
Other Inorganic Materials	13.60
Cellulosics	0.44
Rubber	0.53
Plastics	86.81
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.24E-01
Np-237	1.91E-07
Pu-238	2.42E-02
Pu-239	7.70E-01
Pu-240	1.72E-01
Pu-241	1.55E+00
Pu-242	1.81E-05
Th-229	2.48E-09
Th-230	1.38E-10
Th-232	3.15E-18
U-233	5.30E-06
U-234	3.23E-06
U-235	7.29E-07
U-236	2.55E-08
U-238	1.20E-06

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **IN-W208.243**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	RH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Absolute 8X8 filters:(RH)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	16.75
Aluminum-based Metals/Alloys	14.25
Other Metals	1.06
Other Inorganic Materials	17.77
Cellulosics	86.85
Rubber	8.58
Plastics	35.61
Cements	0.00
Inorganic Matrix	0.36
Organic Matrix	0.03
Soils/gravel	0.13
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.85E+01
Np-237	1.00E-04
Pu-238	1.45E+00
Pu-239	4.78E+01
Pu-240	1.08E+01
Pu-241	1.16E+02
Pu-242	7.80E-04
Th-229	2.25E-12
Th-230	7.41E-09
Th-232	2.85E-15
U-233	3.91E-09
U-234	8.46E-05
U-235	3.95E-05
U-236	6.08E-06
U-238	2.24E-12

Haz. Waste No(s).

D022, D028, D029,
F001, F002, F003,
F005No TRUCON
Codes Provided

Waste Stream Description

This waste stream, generated at the Rocky Flats Plant, consists of absolute filters used for filtering intake and exhaust air from glovebox lines. The filters are composed of wood or particle board frames and an asbestos-type filter media. The waste may include limited amounts of combustible materials (surgical gloves, etc.). Several sizes of filters may be present. This code has not been used since 1975. Since then absolute filters were processed as Content Code 338 (insulation and CWS filter media) or 376 (cemented insulation and filter media). Some of the drums may be lead lined. There is a lack of information about the particulate on the filter media. Although there may be some organic material, it should be less than 14 lb/ft³. Significant amounts of respirable fines may be present. No sludges or free liquids should be present. No explosive, pyrophoric, or corrosive materials should be in this waste. except for some residual amounts of nitric acid. Each filter is double contained in PVC and PE bags and assayed. Up to 12-20 filters are placed in each prepared drum. Small amounts of Oil-Dri are added to drums containing damp filters. Drums were packed according to the usual pre-1972 procedures.

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **INW211.001-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-INW211.001	299.9
55-gal Drum Dir Ld w/o Liner	WP-INW211.001	0.2
SWB w/ 4 - 55-gal Drums w/ Liners	WP-INW211.001	3.8
Shipped Total		303.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.05
Aluminum-based Metals/Alloys	8.60
Other Metals	0.41
Other Inorganic Materials	22.38
Cellulosics	136.35
Rubber	0.08
Plastics	7.29
Cements	0.00
Inorganic Matrix	0.01
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.46E+00
Np-237	3.78E-06
Pu-238	4.34E-01
Pu-239	1.20E+01
Pu-240	2.67E+00
Pu-241	3.06E+01
Pu-242	4.62E-04
Th-229	2.00E-08
Th-230	6.97E-10
Th-232	4.89E-17
U-233	4.26E-05
U-234	1.86E-05
U-235	3.16E-06
U-236	3.96E-07
U-238	4.84E-06

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **INW216.001-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3121	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-INW216.001	1227.4
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	WP-INW216.001	0.6
SWB Dir Ld w/o Liner	WP-INW216.001	11.3
SWB w/ 4 - 55-gal Drums w/ Liners	WP-INW216.001	5.7
Shipped Total		1245.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.01
Aluminum-based Metals/Alloys	0.00
Other Metals	0.08
Other Inorganic Materials	12.65
Cellulosics	0.19
Rubber	0.01
Plastics	0.53
Cements	0.00
Inorganic Matrix	829.38
Organic Matrix	0.18
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.58E+01
Np-237	8.93E-05
Pu-238	8.94E-02
Pu-239	2.62E+00
Pu-240	5.88E-01
Pu-241	6.23E+00
Pu-242	9.49E-05
Th-229	1.51E-08
Th-230	2.70E-08
Th-232	1.55E-17
U-233	2.69E-05
U-234	5.00E-04
U-235	8.28E-05
U-236	1.05E-07
U-238	3.12E-03

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **IN-W216.876**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3121	Handling	RH
Source Cat.	Pollution Control or Waste Treatment Process	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	First Stage Sludge:(RH)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	10.2	0.0	10.2
Current Form Total	10.2	0.0	10.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	15.1	0.0	15.1
Final Form Total	15.1	0.0	15.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	44.60
Cellulosics	0.00
Rubber	0.00
Plastics	4.14
Cements	0.00
Inorganic Matrix	744.00
Organic Matrix	14.90
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.06E+01
Np-237	3.16E-04
Pu-238	7.00E-02
Pu-239	2.30E+00
Pu-240	5.22E-01
Pu-241	5.57E+00
Pu-242	3.76E-05
Th-229	7.77E-12
Th-230	3.57E-10
Th-232	1.38E-16
U-233	1.31E-08
U-234	4.07E-06
U-235	4.31E-08
U-236	2.94E-07
U-238	1.08E-13

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D022, D028, F001, F002, F003

No TRUCON Codes Provided

Waste Stream Description

Waste consists of a wet sludge produced from treating aqueous process wastes, such as ion exchange column effluent, distillates, and caustic scrub solutions generated by Plutonium Recovery Operations (Building 771). Portland cement is added to the waste package for absorption of free liquids. Waste drums may periodically contain surgeons' gloves, glovebox gloves, etc. Since the fall of 1979, First-stage sludge (IDC 001) and Second-stage sludge (IDC 002) have been combined into Content Code 1 - Combined sludge. Sludge is produced by treating aqueous wastes by the carrier precipitation process. Aqueous wastes are made basic, if necessary, with sodium hydroxide. Radioactive elements such as plutonium and americium are chemically precipitated from the liquid waste. Treatment chemicals include ferric sulfate, calcium chloride, magnesium sulfate, and flocculating agents. The treatment process produces a precipitate of the hydrated oxides of iron, magnesium, aluminum, silicon, etc., which also carries the hydrated oxides of plutonium and americium. The precipitate or slurry is filtered to produce a sludge containing 50 to 70 percent water. Liquid wastes were analyzed for fissile content prior to release from Buildings 771 and 774, and were retained at Building 771 for further treatment if contaminated with above-discard amounts of plutonium.

Waste Stream ID: **IN-W216.877**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3121	Handling	RH
Source Cat.	Pollution Control or Waste Treatment Process	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	FIRST STAGE SLUDGE:(RH)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	30.2	0.0	30.2
Current Form Total	30.2	0.0	30.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	43.6	0.0	43.6
Final Form Total	43.6	0.0	43.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	2.30
Other Inorganic Materials	24.20
Cellulosics	0.00
Rubber	0.00
Plastics	6.60
Cements	215.30
Inorganic Matrix	323.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.53E+01
Np-237	1.58E-04
Pu-238	3.50E-02
Pu-239	1.15E+00
Pu-240	2.61E-01
Pu-241	2.79E+00
Pu-242	1.88E-05
Th-229	3.88E-12
Th-230	1.78E-10
Th-232	6.89E-17
U-233	6.51E-09
U-234	2.04E-06
U-235	2.15E-08
U-236	1.47E-07
U-238	5.39E-14

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D022, D028, F001, F002, F003

TRUCON Code(s)

111/211

Waste Stream Description

Waste consists of a wet sludge produced from treating aqueous process wastes, such as ion exchange column effluent, distillates, and caustic scrub solutions generated by Plutonium Recovery Operations (Building 771). Portland cement is added to the waste package for absorption of free liquids. Waste drums may periodically contain surgeons' gloves, glovebox gloves, etc. Since the fall of 1979, first-stage sludge (IDC 001) and Second stage sludge (IDC 002) have been combined into Content Code 1 - Combined sludge. Sludge is produced by treating aqueous wastes by the carrier precipitation process. Aqueous wastes are made basic, if necessary, with sodium hydroxide. Radioactive elements such as plutonium and americium are chemically precipitated from the liquid waste. Treatment chemicals include ferric sulfate, calcium chloride, magnesium sulfate, and flocculating agents. The treatment process produces a precipitate of the hydrated oxides of iron, magnesium, aluminum, silicon, etc., which also carries the hydrated oxides of plutonium and americium. The precipitate or slurry is filtered to produce a sludge containing 50 to 70 percent water. Liquid wastes were analyzed for fissile content prior to release from Buildings 771 and 774, and were retained at Building 771 for further treatment if contaminated with above-discard amounts of plutonium.

Waste Stream ID: **INW218.001-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3121	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-INW218.001	833.0
SWB Dir Ld w/o Liner	WP-INW218.001	275.9
SWB w/ 4 - 55-gal Drums w/ Liners	WP-INW218.001	1.9
Shipped Total		1110.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.01
Other Inorganic Materials	16.30
Cellulosics	0.16
Rubber	0.01
Plastics	1.25
Cements	0.00
Inorganic Matrix	753.19
Organic Matrix	0.19
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.45E-01
Np-237	1.45E-06
Pu-238	1.49E-02
Pu-239	4.48E-01
Pu-240	1.00E-01
Pu-241	1.05E+00
Pu-242	1.53E-05
Th-229	5.64E-09
Th-230	4.49E-08
Th-232	2.64E-18
U-233	1.00E-05
U-234	8.32E-04
U-235	9.20E-05
U-236	1.78E-08
U-238	7.87E-03

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **INW222.001-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3150	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-INW222.001	65.1
Shipped Total		65.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.03
Other Inorganic Materials	0.76
Cellulosics	0.04
Rubber	0.00
Plastics	16.36
Cements	0.00
Inorganic Matrix	566.62
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.24E-01
Np-237	1.27E-06
Pu-238	1.52E-01
Pu-239	4.36E+00
Pu-240	9.80E-01
Pu-241	9.57E+00
Pu-242	1.14E-04
Th-229	2.07E-15
Th-230	6.41E-10
Th-232	1.79E-17
U-233	1.34E-11
U-234	1.54E-05
U-235	1.62E-06
U-236	1.45E-07
U-238	1.08E-04

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **IN-W228.884**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Organics	Waste Matrix Code	S3121	Handling	RH
Source Cat.	Pollution Control or Waste Treatment Process	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SECOND STAGE SLUDGE:(RH)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	8.9	0.0	8.9
Final Form Total	8.9	0.0	8.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.70
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	21.00
Cellulosics	0.00
Rubber	0.01
Plastics	1.90
Cements	21.00
Inorganic Matrix	310.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.40E-01
Np-237	4.33E-06
Pu-238	5.60E-03
Pu-239	1.83E-01
Pu-240	4.14E-02
Pu-241	4.62E-01
Pu-242	2.98E-06
Th-229	9.49E-14
Th-230	2.55E-11
Th-232	9.84E-18
U-233	1.69E-10
U-234	3.08E-07
U-235	3.25E-09
U-236	2.21E-08
U-238	8.09E-15

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D022, D028, F001, F002, F003

No TRUCON Codes Provided

Waste Stream Description

Waste consists of a wet sludge produced from treatment of other plant radioactive and/or chemical contaminated wastes and further treatment of the first-stage effluent. Portland cement was added to the waste package for absorption of free liquids. □ Second-stage sludge drums packaged prior to 1973 may contain other waste such as electric motors, bottles of chemical (usually liquid) wastes, mercury, lithium batteries, and small amounts of contaminated mercury in pint bottles. Radioactive sources were also periodically included in second-stage drums through 1979. □ Since the fall of 1979, Second stage sludge (IDC 002) have been combined into Content Code 1 - Combined sludge. Content code 2 is no longer used. □ Sludge is produced by treating aqueous wastes by the carrier precipitation process. Aqueous wastes are made basic, if necessary, with sodium hydroxide. Radioactive elements such as plutonium and americium are chemically precipitated from the liquid waste. Treatment chemicals include ferric sulfate, calcium chloride, magnesium sulfate, and flocculating agents. The treatment process produces a precipitate of the hydrated oxides of iron, magnesium, aluminum, silicon, etc., which also carries the hydrated oxides of plutonium and americium. The precipitate or slurry is filtered to produce a sludge containing 50 to 70 percent water. □ Liquid wastes were analyzed for fissile content prior to release from Buildings 771 and 774, and were retained at Building 771 for further treatment if contaminated with above-discard amounts of plutonium

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **IN-W228.885**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3121	Handling	RH
Source Cat.	Pollution Control or Waste Treatment Process	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SECOND STAGE SLUDGE:(RH)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.70
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	21.00
Cellulosics	0.00
Rubber	0.01
Plastics	1.90
Cements	21.00
Inorganic Matrix	310.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.23E-01
Np-237	7.19E-07
Pu-238	9.37E-04
Pu-239	3.05E-02
Pu-240	6.91E-03
Pu-241	7.74E-02
Pu-242	4.97E-07
Th-229	1.58E-14
Th-230	4.26E-12
Th-232	1.64E-18
U-233	2.80E-11
U-234	5.14E-08
U-235	5.41E-10
U-236	3.69E-09
U-238	1.35E-15

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D022, D028, F001, F002, F003

No TRUCON Codes Provided

Waste Stream Description

Waste consists of a wet sludge produced from treatment of other plant radioactive and/or chemical contaminated wastes and further treatment of the first-stage effluent. Portland cement was added to the waste package for absorption of free liquids. □ Second-stage sludge drums packaged prior to 1973 may contain other waste such as electric motors, bottles of chemical (usually liquid) wastes, mercury, lithium batteries, and small amounts of contaminated mercury in pint bottles. Radioactive sources were also periodically included in second-stage drums through 1979. □ Since the fall of 1979, Second stage sludge (IDC 002) have been combined into Content Code 1 - Combined sludge. Content code 2 is no longer used. □ Sludge is produced by treating aqueous wastes by the carrier precipitation process. Aqueous wastes are made basic, if necessary, with sodium hydroxide. Radioactive elements such as plutonium and americium are chemically precipitated from the liquid waste. Treatment chemicals include ferric sulfate, calcium chloride, magnesium sulfate, and flocculating agents. The treatment process produces a precipitate of the hydrated oxides of iron, magnesium, aluminum, silicon, etc., which also carries the hydrated oxides of plutonium and americium. The precipitate or slurry is filtered to produce a sludge containing 50 to 70 percent water. □ Liquid wastes were analyzed for fissile content prior to release from Buildings 771 and 774, and were retained at Building 771 for further treatment if contaminated with above-discard amounts of plutonium

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **IN-W228.886**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3121	Handling	RH
Source Cat.	Pollution Control or Waste Treatment Process	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SECOND STAGE SLUDGE:(RH)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	14.8	0.0	14.8
Current Form Total	14.8	0.0	14.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	21.4	0.0	21.4
Final Form Total	21.4	0.0	21.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.70
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	21.00
Cellulosics	0.00
Rubber	0.01
Plastics	1.90
Cements	21.00
Inorganic Matrix	310.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.70E-01
Np-237	2.16E-06
Pu-238	2.80E-03
Pu-239	9.15E-02
Pu-240	2.07E-02
Pu-241	2.32E-01
Pu-242	1.49E-06
Th-229	4.74E-14
Th-230	1.27E-11
Th-232	4.91E-18
U-233	8.43E-11
U-234	1.54E-07
U-235	1.62E-09
U-236	1.10E-08
U-238	4.05E-15

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D022, D028, F001, F002, F003

TRUCON Code(s)

111/211

Waste Stream Description

Waste consists of a wet sludge produced from treatment of other plant radioactive and/or chemical contaminated wastes and further treatment of the first-stage effluent. Portland cement was added to the waste package for absorption of free liquids. □ Second-stage sludge drums packaged prior to 1973 may contain other waste such as electric motors, bottles of chemical (usually liquid) wastes, mercury, lithium batteries, and small amounts of contaminated mercury in pint bottles. Radioactive sources were also periodically included in second-stage drums through 1979. □ Since the fall of 1979, Second stage sludge (IDC 002) have been combined into Content Code 1 - Combined sludge. Content code 2 is no longer used. □ Sludge is produced by treating aqueous wastes by the carrier precipitation process. Aqueous wastes are made basic, if necessary, with sodium hydroxide. Radioactive elements such as plutonium and americium are chemically precipitated from the liquid waste. Treatment chemicals include ferric sulfate, calcium chloride, magnesium sulfate, and flocculating agents. The treatment process produces a precipitate of the hydrated oxides of iron, magnesium, aluminum, silicon, etc., which also carries the hydrated oxides of plutonium and americium. The precipitate or slurry is filtered to produce a sludge containing 50 to 70 percent water. □ Liquid wastes were analyzed for fissile content prior to release from Buildings 771 and 774, and were retained at Building 771 for further treatment if contaminated with above-discard amounts of plutonium.

Waste Stream ID: **INW243.001-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5122	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-INW243.001	73.8
55-gal Drum Dir Ld w/o Liner	WP-INW243.001	1.0
Shipped Total		74.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.37
Aluminum-based Metals/Alloys	0.01
Other Metals	11.00
Other Inorganic Materials	163.61
Cellulosics	0.58
Rubber	0.10
Plastics	23.80
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.98E-01
Np-237	1.87E-06
Pu-238	1.36E-01
Pu-239	3.16E+00
Pu-240	7.07E-01
Pu-241	7.32E+00
Pu-242	9.10E-05
Th-229	1.86E-08
Th-230	1.39E-09
Th-232	1.86E-17
U-233	3.30E-05
U-234	2.69E-05
U-235	5.99E-06
U-236	1.26E-07
U-238	4.24E-06

Haz. Waste No(s).

D005, D008, D009,
D022, F001, F002,
F005No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **IN-W243.276**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Analytical Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	GLASS: (RH)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.5	0.0	2.5
Current Form Total	2.5	0.0	2.5

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	1.15
Other Inorganic Materials	208.53
Cellulosics	0.00
Rubber	0.76
Plastics	22.60
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.93E-01
Np-237	1.70E-06
Pu-238	6.54E-02
Pu-239	2.14E+00
Pu-240	4.84E-01
Pu-241	5.42E+00
Pu-242	3.49E-05
Th-229	2.94E-14
Th-230	2.97E-10
Th-232	1.15E-16
U-233	5.72E-11
U-234	3.59E-06
U-235	6.55E-07
U-236	2.59E-07
U-238	4.26E-08

Haz. Waste No(s).

D008, D029, F001, F002, F003, F005

TRUCON Code(s)

118/218

Waste Stream Description

This waste stream, generated at the Rocky Flats Plant, consists of glass sample vials, bottles, lead-taped sample vials, ion exchange columns, dissolver ports, laboratory glassware such as pyrex flasks and beakers, glovebox windows (glass, plexiglass, leaded glass), and crushed and ground glass. The waste includes limited amounts of other non-combustibles such as metals, and limited amounts of combustible wastes. No sludges should be present although some glass vials may contain limited amounts of free liquids. No explosive, pyrophoric, or corrosive materials should be in the waste. Drums may contain respirable crushed glass fines or free liquids. The glass may be packaged with some variation depending on if it is whole, broken to pieces, or crushed or ground. Whole or broken glass may be packaged in 1-gallon PE bottles, in 13-inch high by 15.5-inch diameter Fibre-Paks (either loose or inside plastic bags inside the Fibre-Pak), or double-packed in plastic bags, with the outside of the outer bag taped for protection against sharp edges. Glassware such as sample vials may be taped together before packaging. Nonline generated glassware, light bulbs, and fluorescent tubes are usually crushed or ground and placed directly into a prepared 55-gallon drum. Drums were packed according to the usual pre-1972 and post-1972 procedures.

Each drum was assayed. Since 1972, the drums were also processed according to inspection and sealing procedures; and since 1982, vermiculite instead of Oil-Dri was placed on the top of the outer sealed PE drum bag. A small number of the drums are lead-lined. Also, Oil-Dri was added to the glass waste if moisture was present.

Waste Stream ID: **IN-W243.277**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Analytical Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	GLASS: (RH)t	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	2500.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.57E+00
Np-237	6.80E-06
Pu-238	2.62E-01
Pu-239	8.54E+00
Pu-240	1.94E+00
Pu-241	2.17E+01
Pu-242	1.39E-04
Th-229	1.18E-13
Th-230	1.19E-09
Th-232	4.60E-16
U-233	2.29E-10
U-234	1.44E-05
U-235	2.62E-06
U-236	1.03E-06
U-238	1.70E-07

Haz. Waste No(s).

D008, D029, F001, F002, F003, F005

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at the Rocky Flats Plant, consists of glass sample vials, bottles, lead-taped sample vials, ion exchange columns, dissolver ports, laboratory glassware such as pyrex flasks and beakers, glovebox windows (glass, plexiglass, leaded glass), and crushed and ground glass. The waste includes limited amounts of other non-combustibles such as metals, and limited amounts of combustible wastes. No sludges should be present although some glass vials may contain limited amounts of free liquids. No explosive, pyrophoric, or corrosive materials should be in the waste. Drums may contain respirable crushed glass fines or free liquids. The glass may be packaged with some variation depending on if it is whole, broken to pieces, or crushed or ground. Whole or broken glass may be packaged in 1-gallon PE bottles, in 13-inch high by 15.5-inch diameter Fibre-Paks (either loose or inside plastic bags inside the Fibre-Pak), or double-packed in plastic bags, with the outside of the outer bag taped for protection against sharp edges. Glassware such as sample vials may be taped together before packaging. Nonline generated glassware, light bulbs, and fluorescent tubes are usually crushed or ground and placed directly into a prepared 55-gallon drum. Drums were packed according to the usual pre-1972 and post-1972 procedures.

Each drum was assayed. Since 1972, the drums were also processed according to inspection and sealing procedures; and since 1982, vermiculite instead of Oil-Dri was placed on the top of the outer sealed PE drum bag. A small number of the drums are lead-lined. Also, Oil-Dri was added to the glass waste if moisture was present.

Waste Stream ID: **INW247.001R1-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5122	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-INW247.001R1	112.7
55-gal Drum Dir Ld w/o Liner	WP-INW247.001R1	4.2
Shipped Total		116.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.15
Aluminum-based Metals/Alloys	0.00
Other Metals	0.01
Other Inorganic Materials	233.57
Cellulosics	19.55
Rubber	0.00
Plastics	1.28
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.45E-01
Np-237	1.37E-06
Pu-238	2.07E-01
Pu-239	3.55E+00
Pu-240	8.10E-01
Pu-241	8.56E+00
Pu-242	6.77E-05
Th-229	3.63E-08
Th-230	1.09E-10
Th-232	2.14E-17
U-233	6.45E-05
U-234	3.81E-06
U-235	7.23E-08
U-236	1.44E-07
U-238	6.13E-14

Haz. Waste No(s).

D008, F001, F002

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **INW252.001-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5311	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-INW252.001	60.9
Shipped Total		60.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	207.33
Other Inorganic Materials	4.03
Cellulosics	0.10
Rubber	208.17
Plastics	3.38
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.90E-01
Np-237	1.33E-06
Pu-238	1.96E-01
Pu-239	4.95E+00
Pu-240	1.12E+00
Pu-241	1.65E+01
Pu-242	1.12E-04
Th-229	2.12E-15
Th-230	6.32E-10
Th-232	2.06E-17
U-233	1.38E-11
U-234	1.55E-05
U-235	3.71E-06
U-236	1.67E-07
U-238	8.43E-14

Haz. Waste No(s).

D008, D022, F001, F002, F003, F005, F006, F007, F009

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **IN-W252.282**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	LEADED RUBBER GLOVES AND APRONS: (RH)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	12.1	0.0	12.1
Current Form Total	12.1	0.0	12.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	17.8	0.0	17.8
Final Form Total	17.8	0.0	17.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	13.40
Cellulosics	2.60
Rubber	286.00
Plastics	8.40
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.08E+00
Np-237	4.28E-06
Pu-238	2.22E-01
Pu-239	7.25E+00
Pu-240	1.64E+00
Pu-241	1.84E+01
Pu-242	1.18E-04
Th-229	6.70E-14
Th-230	1.01E-09
Th-232	3.89E-16
U-233	1.36E-10
U-234	1.22E-05
U-235	1.29E-07
U-236	8.74E-07
U-238	3.20E-13

Haz. Waste No(s).

D008, D022, D028, D029, F001, F002, F003, F005

TRUCON Code(s)

123/223

Waste Stream Description

This waste comes from the Rocky Flats Plant and consists of leaded rubber gloves and aprons. A limited amount of unleaded gloves, lead bricks, and lead sheeting may also be present. Content Code 463 was replaced by Content Code 339 in 1973. Waste is packaged in standard RFP fashion. Lead linings are present on some drums.

Waste Stream ID: **IN-W254.1045**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	LEADED RUBBER GLOVES AND APRONS: (RH)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	178.10
Other Inorganic Materials	20.10
Cellulosics	3.80
Rubber	185.70
Plastics	11.40
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.98E-01
Np-237	1.67E-06
Pu-238	1.33E-01
Pu-239	4.33E+00
Pu-240	9.81E-01
Pu-241	1.10E+01
Pu-242	7.07E-05
Th-229	2.05E-14
Th-230	6.04E-10
Th-232	2.33E-16
U-233	4.66E-11
U-234	7.28E-06
U-235	7.68E-08
U-236	5.24E-07
U-238	1.92E-13

Haz. Waste No(s).

D008, F001, F002

TRUCON Code(s)

123/223

Waste Stream Description

This waste comes from the Rocky Flats Plant and consists of leaded rubber gloves and aprons. A limited amount of unleaded gloves, lead bricks, and lead sheeting may also be present. Content Code 463 was replaced by Content Code 339 in 1973. Waste is packaged in standard RFP fashion. Lead linings are present on some drums.

Waste Stream ID: **IN-W263.520**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Soils	Waste Matrix Code	S4100	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CONTAMINATED SOIL			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Misc	120.5	0.0	120.5
Current Form Total	120.5	0.0	120.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	45.4	0.0	45.4
TDOP w/ 10 - 55-gal Drums w/ Liners	220.5	0.0	220.5
Final Form Total	265.9	0.0	265.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.09
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	5.67
Cellulosics	16.82
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	542.81
Vitrified	0.00
Packaging Material, Steel	218.44
Packaging Material, Plastic	14.39
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.88E-04
Np-237	6.31E-10
Pu-238	1.27E+00
Pu-239	6.79E-02
Pu-240	1.08E-04
Pu-241	4.15E-03
Pu-242	9.44E-08
Th-229	7.73E-18
Th-230	5.76E-09
Th-232	2.56E-20
U-233	1.76E-14
U-234	6.95E-05
U-235	1.20E-09
U-236	5.76E-11
U-238	2.56E-16

Haz. Waste No(s).

D006, D007, D008,
D009, D010, D011No TRUCON
Codes Provided

Waste Stream Description

This waste, generated at Mound Laboratories, consists of soil, including small rocks and pebbles, generated from cleanup of a leak. All soil waste was dry when packaged. A few waste boxes also include picks, shovels, metal cans, rubber gloves, booties, respirators, plastic, and possibly an air hammer and chisel. Soils waste was packaged in small, plastic lined plywood boxes (42 x 20 x 39 inch) other waste was then placed on top of the soil before the box was sealed. Four of the small boxes were then packaged in a standard larger waste box (4 x 4 x 7 feet) lined with fiberglass-reinforced polyester. Assay was performed using radiochemical analysis on core samples taken from the contaminated area.

Waste Stream ID: **INW276.001-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5126	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-INW276.001	10.2
Shipped Total		10.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	329.28
Cellulosics	4.61
Rubber	0.00
Plastics	3.73
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.44E-01
Np-237	1.54E-06
Pu-238	2.24E-01
Pu-239	3.12E+00
Pu-240	7.11E-01
Pu-241	7.58E+00
Pu-242	6.42E-05
Th-229	9.58E-15
Th-230	3.02E-10
Th-232	5.21E-17
U-233	3.15E-11
U-234	6.62E-06
U-235	5.64E-08
U-236	2.11E-07
U-238	9.69E-14

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **INW276.002-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5126	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-INW276.002	16.0
Shipped Total		16.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	320.62
Cellulosics	8.74
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.45E-01
Np-237	1.42E-06
Pu-238	2.15E-01
Pu-239	2.98E+00
Pu-240	6.79E-01
Pu-241	7.58E+00
Pu-242	6.13E-05
Th-229	3.84E-08
Th-230	2.49E-10
Th-232	4.03E-17
U-233	4.56E-05
U-234	5.90E-06
U-235	7.39E-08
U-236	1.81E-07
U-238	8.32E-14

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **INW276.003-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5126	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-INW276.003	182.6
55-gal Drum Dir Ld w/o Liner	WP-INW276.003	4.0
Shipped Total		186.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.04
Aluminum-based Metals/Alloys	0.00
Other Metals	0.04
Other Inorganic Materials	329.25
Cellulosics	8.62
Rubber	0.00
Plastics	1.35
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.73E+00
Np-237	3.57E-06
Pu-238	6.85E-01
Pu-239	9.25E+00
Pu-240	2.11E+00
Pu-241	2.63E+01
Pu-242	1.96E-04
Th-229	1.83E-07
Th-230	5.02E-10
Th-232	7.57E-17
U-233	2.79E-04
U-234	1.49E-05
U-235	2.74E-07
U-236	4.38E-07
U-238	6.00E-09

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **INW276.004-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5126	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-INW276.004	42.4
55-gal Drum Dir Ld w/o Liner	WP-INW276.004	4.4
Shipped Total		46.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.25
Aluminum-based Metals/Alloys	0.00
Other Metals	0.17
Other Inorganic Materials	327.99
Cellulosics	2.14
Rubber	0.00
Plastics	3.07
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.68E+00
Np-237	3.51E-06
Pu-238	5.71E-01
Pu-239	7.84E+00
Pu-240	1.79E+00
Pu-241	2.20E+01
Pu-242	1.63E-04
Th-229	6.36E-07
Th-230	5.56E-10
Th-232	6.41E-17
U-233	9.69E-04
U-234	1.46E-05
U-235	6.59E-07
U-236	3.71E-07
U-238	1.73E-13

Haz. Waste No(s).

D008, D029, D040,
F001, F002, F005**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **IN-W294.343**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5110	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	LEACHED NONSPECIAL SOURCE METAL:(RH)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	8.9	0.0	8.9
Final Form Total	8.9	0.0	8.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	113.00
Aluminum-based Metals/Alloys	6.70
Other Metals	85.10
Other Inorganic Materials	22.10
Cellulosics	0.00
Rubber	0.00
Plastics	11.40
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.34E-01
Np-237	1.65E-06
Pu-238	9.63E-02
Pu-239	3.15E+00
Pu-240	7.13E-01
Pu-241	7.99E+00
Pu-242	5.14E-05
Th-229	2.44E-14
Th-230	4.38E-10
Th-232	1.69E-16
U-233	5.07E-11
U-234	5.28E-06
U-235	2.08E-06
U-236	3.81E-07
U-238	1.40E-13

Haz. Waste No(s).

D008, D022, F001,
F002, F005

TRUCON Code(s)

117/217

Waste Stream Description

The waste comes from Rocky Flats Plant. It consists of the smaller pieces of the waste described under Content Code 480 that have been washed with hot water to recover plutonium. The waste is packaged in standard RFP fashion. Sharp metal edges are taped before packaging. Some lead-lined containers are included.

Waste Stream ID: **INW296.001-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Lead/Cadmium Metal Waste	Waste Matrix Code	S5112	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-INW296.001	93.2
55-gal Drum Dir Ld w/o Liner	WP-INW296.001	4.6
Shipped Total		97.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	5.43
Aluminum-based Metals/Alloys	0.39
Other Metals	220.74
Other Inorganic Materials	11.39
Cellulosics	0.93
Rubber	1.78
Plastics	4.31
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.58E+00
Np-237	2.95E-06
Pu-238	2.92E-01
Pu-239	5.25E+00
Pu-240	1.19E+00
Pu-241	1.28E+01
Pu-242	1.13E-04
Th-229	5.84E-08
Th-230	5.09E-10
Th-232	3.14E-17
U-233	1.04E-04
U-234	1.20E-05
U-235	1.58E-06
U-236	2.12E-07
U-238	4.05E-06

Haz. Waste No(s).

D006, D007, D008,
D009, D011, D028,
F001, F002, F003,
F005, F006, F007,
F009

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **IN-W296.330**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5110	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	NONSPECIAL SOURCE METAL:(RH)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	8.7	0.0	8.7
Current Form Total	8.7	0.0	8.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	12.5	0.0	12.5
Final Form Total	12.5	0.0	12.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	40.90
Aluminum-based Metals/Alloys	2.70
Other Metals	111.60
Other Inorganic Materials	13.10
Cellulosics	2.70
Rubber	1.20
Plastics	18.30
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.08E-01
Np-237	3.50E-06
Pu-238	2.23E-02
Pu-239	7.28E-01
Pu-240	1.65E-01
Pu-241	1.85E+00
Pu-242	1.19E-05
Th-229	2.09E-13
Th-230	1.01E-10
Th-232	3.91E-17
U-233	2.53E-10
U-234	1.22E-06
U-235	1.25E-07
U-236	8.80E-08
U-238	3.23E-14

Haz. Waste No(s).

D008, D028, D029,
F001, F002, F003,
F005

TRUCON Code(s)

117/217

Waste Stream Description

The waste comes from Rocky Flats Plant. It consists of the nonline- and line-generated wastes. The waste may be in the form of gloveboxes, glovebox windows, furnaces, lathes, drill presses, ducting, piping, angle iron, tanks, downdraft tables, part carriers, respirator filters, ultrasonic cleaners, control panels, electronic instrumentation, vacuum sweepers, pumps, motors, railing, stairs, metal racks and trays, hotplates, empty metal produce and paint cans, carts, power tools (saws, drills, etc.) hand tools (wrenches hammers, saws, chisels, gauges, etc.), chairs desks, tables, typewriters, filing cabinets, crushed 55-gallon drums, etc. The waste may also include limited amounts of combustible wastes. The waste is packaged in standard RFP fashion. Sharp metal edges are taped before packaging. Some lead lined containers are included.

Waste Stream ID: **IN-W296.331**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5112	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	NONSPECIAL SOURCE METAL:(RH)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	8.7	0.0	8.7
Current Form Total	8.7	0.0	8.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	12.5	0.0	12.5
Final Form Total	12.5	0.0	12.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	230.79
Aluminum-based Metals/Alloys	1.27
Other Metals	10.50
Other Inorganic Materials	0.49
Cellulosics	7.19
Rubber	0.20
Plastics	4.84
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.01
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.63E-01
Np-237	1.16E-05
Pu-238	7.44E-02
Pu-239	2.43E+00
Pu-240	5.50E-01
Pu-241	6.18E+00
Pu-242	3.97E-05
Th-229	6.94E-13
Th-230	3.38E-10
Th-232	1.31E-16
U-233	8.41E-10
U-234	4.08E-06
U-235	4.15E-07
U-236	2.94E-07
U-238	1.08E-13

Haz. Waste No(s).

D008, D028, D029,
F001, F002, F003,
F005No TRUCON
Codes Provided

Waste Stream Description

The waste comes from Rocky Flats Plant. It consists of the nonline- and line-generated wastes. The waste may be in the form of gloveboxes, glovebox windows, furnaces, lathes, drill presses, ducting, piping, angle iron, tanks, downdraft tables, part carriers, respirator filters, ultrasonic cleaners, control panels, electronic instrumentation, vacuum sweepers, pumps, motors, railing, stairs, metal racks and trays, hotplates, empty metal produce and paint cans, carts, power tools (saws, drills, etc.) hand tools (wrenches hammers, saws, chisels, gauges, etc.), chairs desks, tables, typewriters, filing cabinets, crushed 55-gallon drums, etc. The waste may also include limited amounts of combustible wastes. The waste is packaged in standard RFP fashion. Sharp metal edges are taped before packaging. Some lead lined containers are included.

Waste Stream ID: **IN-W298.318**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	TANTALUM:(RH)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	129.00
Aluminum-based Metals/Alloys	4.40
Other Metals	28.40
Other Inorganic Materials	14.60
Cellulosics	9.60
Rubber	1.00
Plastics	9.50
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.55E+00
Np-237	1.16E-05
Pu-238	3.69E-01
Pu-239	1.20E+01
Pu-240	2.73E+00
Pu-241	3.06E+01
Pu-242	1.97E-04
Th-229	2.09E-13
Th-230	1.68E-09
Th-232	6.47E-16
U-233	4.00E-10
U-234	2.02E-05
U-235	2.13E-07
U-236	1.46E-06
U-238	5.35E-13

Haz. Waste No(s).

D008, F001, F002

TRUCON Code(s)

117/217

Waste Stream Description

This waste comes from the Rocky Flats Plant. It consists of used tantalum crucibles, funnels, funnel inserts, and pour-rods. This waste is packaged in standard RFP fashion. Sharp metal edges are taped before packaging. Other metals may include tungsten, platinum, and lead. Some lead-lined containers are included.

Waste Stream ID: **IN-W315.601**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3143	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	EVAPORATOR SALTS	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	11.0	0.0	11.0
Box - Misc	3.2	0.0	3.2
Current Form Total	14.2	0.0	14.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1.2	0.0	1.2
SWB Dir Ld w/ Liner	5.7	0.0	5.7
Final Form Total	6.9	0.0	6.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	4.69
Aluminum-based Metals/Alloys	0.00
Other Metals	2.72
Other Inorganic Materials	7.70
Cellulosics	69.92
Rubber	0.00
Plastics	0.53
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	149.40
Packaging Material, Plastic	7.66
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.30E+01
Np-237	3.73E-04
Pu-238	2.52E-02
Pu-239	8.23E-01
Pu-240	1.87E-01
Pu-241	2.09E+00
Pu-242	1.34E-05
Th-229	8.24E-12
Th-230	1.15E-10
Th-232	4.43E-17
U-233	1.46E-08
U-234	1.39E-06
U-235	1.46E-08
U-236	9.97E-08
U-238	3.64E-14

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Waste is generated at Rocky Flats Plant from aqueous waste treatment in building 774. Waste consists of a salt residue generated from concentrating and drying liquid waste from the solar evaporation ponds. The approximate chemical makeup of the salt is 60% sodium nitrate, 30% potassium nitrate, and 10% miscellaneous. Limited amounts of other wastes such as surgeons' gloves, paper, rags, and metal may be found in the waste drums. Portland cement was added to damp or wet salt when necessary.

The majority of salt drums in storage at the INEL should be contaminated with <10 nCi/g TRU. Salt waste is no longer shipped to the INEL.

Since 1972, drums have been inspected for free liquids, proper packaging, and use of the proper content code. After inspection, approximately 1 to 2 quarts of Oil-Dri was placed on top of the outer sealed polyethylene drum bag.

Waste Stream ID: **IN-W319.584**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Combustible	Waste Matrix Code	S5390	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	LEACHED RESIN:	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	8.15
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	10.48
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	231.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.94E-01
Np-237	1.32E-06
Pu-238	1.58E-01
Pu-239	5.02E+00
Pu-240	1.11E+00
Pu-241	8.70E+00
Pu-242	2.92E-04
Th-229	1.62E-14
Th-230	7.18E-10
Th-232	2.63E-16
U-233	3.68E-11
U-234	8.66E-06
U-235	8.91E-08
U-236	5.92E-07
U-238	7.93E-13

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste, generated at the Rocky Flats Plant, consists of anionic and cationic exchange resins used in the purification and recovery of plutonium and americium, respectively. It is believed that the resins were Content Code 430 resins that were processed by leaching to recover plutonium. Content code was used during 1972 only.

Waste Stream ID: **IN-W321.1023**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Combustible	Waste Matrix Code	S5390	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	UNLEACHED ION COLUMN RESIN:			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	1.9	0.0	1.9
TDOP w/ 10 - 55-gal Drums w/o Liners	9.0	0.0	9.0
Final Form Total	10.9	0.0	10.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	14.54
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	18.70
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	218.21
Packaging Material, Plastic	0.21
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.42E+00
Np-237	4.78E-06
Pu-238	5.70E-01
Pu-239	1.82E+01
Pu-240	4.01E+00
Pu-241	3.15E+01
Pu-242	5.90E-04
Th-229	5.87E-14
Th-230	2.59E-09
Th-232	9.53E-16
U-233	1.33E-10
U-234	3.13E-05
U-235	3.23E-07
U-236	2.14E-06
U-238	1.60E-12

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste, generated at the Rocky Flats Plant, consists of anionic and cationic exchange resins used in the purification and recovery of plutonium and americium, respectively. The anionic resins were DOWEX 1-X4 and the cationic resins were DOWEX 50W-X8, both being polystyrene-divinylbenzene copolymers.

Waste Stream ID: **IN-W357.1022**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3111	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	FLUID BED ASH:			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.04
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	3.39
Cellulosics	5.03
Rubber	0.00
Plastics	0.78
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	231.80
Packaging Material, Plastic	17.10
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.23E-02
Np-237	4.15E-08
Pu-238	4.93E-03
Pu-239	1.57E-01
Pu-240	3.46E-02
Pu-241	2.73E-01
Pu-242	7.13E-06
Th-229	5.08E-16
Th-230	2.24E-11
Th-232	8.23E-18
U-233	1.16E-12
U-234	2.70E-07
U-235	2.79E-09
U-236	1.85E-08
U-238	1.94E-14

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste, generated at the Rocky Flats Plant, consists of ash generated from the experimental pilot and demonstration fluid bed incinerator plants. Combustibles used for experiments were contaminated with low levels of Pu. Ash is packaged in standard RFP drums. Drums were assayed and fissile quantities calculated.

Waste Stream ID: **IN-W375.1096**

Appendix A

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3122	Handling	CH
Source Cat.	Pollution Control or Waste Treatment Process	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SLUDGE:Direct Ship	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	62.8	0.0	62.8
Box - Misc	25.4	0.0	25.4
Current Form Total	88.2	0.0	88.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	32.1	0.0	32.1
TDOP w/ 10 - 55-gal Drums w/ Liners	157.5	0.0	157.5
Final Form Total	189.6	0.0	189.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	96.11
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	57.66
Inorganic Matrix	86.53
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	218.53
Packaging Material, Plastic	14.41
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.23E-03
Np-237	2.43E-08
Pu-238	2.89E-03
Pu-239	9.23E-02
Pu-240	2.04E-02
Pu-241	1.60E-01
Pu-242	3.70E-06
Th-229	2.98E-16
Th-230	1.31E-11
Th-232	4.84E-18
U-233	6.76E-13
U-234	1.59E-07
U-235	1.64E-09
U-236	1.09E-08
U-238	1.01E-14

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at the Rocky Flats Plant, is sewage sludge from cleaning stabilization ponds. This waste also contains a limited number of drums containing sludge generated by plutonium recovery operations. The sludge may be moist or dry, and may consist of fines, chunks or pieces of dried cake. Shipment of sewer sludge to the INEL stopped in 1976.

There are high levels of fines. In addition the drums may contain free liquids. The sewage sludge should contain less than 10 nCi/g TRU elements. The portion of the waste that is suspected to be TRU is addressed by this waste stream. Organic content in the sludge is not known. No free liquids should be present. No explosive, pyrophoric, or corrosive materials should be in the waste.

Sewer sludge was placed directly into prepared 55-gallon drums until 1974. Drums were prepared according to pre and post-1972 procedures. Portland cement was added to the bottom and top of the inner bag. If the sludge was moist, portland cement was also added in layers with the sludge. Since 1974, packaging was changed to 4 x 4 x 7 ft fiberglass-reinforced polyester (FRP) coated plywood boxes due to the pressure buildup in the drums. Each box was lined with a PE bag and a cardboard liner. About 90 lb of portland cement was added to the bottom and top of each box. Fissile content of the sewage was determined by radiochemical analysis of sludge samples.

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: KA-T001

Appendix A

TRU Waste Inventory Profile Report

Site	Knolls Atomic Power Laboratory - Schenectady	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Transuranic Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
5-gal Can	2.0	4.9	6.9
Current Form Total	2.0	4.9	6.9
Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	30.3	72.1	102.4
Final Form Total	30.3	72.1	102.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	98.20
Aluminum-based Metals/Alloys	0.60
Other Metals	0.10
Other Inorganic Materials	2.40
Cellulosics	80.90
Rubber	7.30
Plastics	64.90
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.40E-04
Am-243	5.57E-07
Cm-244	1.32E-05
Cs-137	7.25E-01
Np-237	9.00E-06
Pu-238	2.88E-02
Pu-239	7.99E-05
Pu-240	2.00E-05
Pu-241	2.23E-03
Pu-242	7.63E-08
Pu-244	1.81E-14
Sr-90	6.88E-01
Th-229	1.21E-11
Th-230	1.70E-08
Th-232	4.38E-13
U-233	4.30E-09
U-234	5.13E-05
U-235	7.61E-07
U-236	7.22E-06
U-238	3.34E-09

No Hazardous Waste Numbers Provided

TRUCON Code(s)
325

Waste Stream Description

Organic and inorganic particulate and debris.

Waste Stream ID: **KA-W016**

Appendix A

TRU Waste Inventory Profile Report

Site	Knolls Atomic Power Laboratory - Schenectady	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Transuranic Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
5-gal Can	0.0	0.5	0.5
Current Form Total	0.0	0.5	0.5

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	98.20
Aluminum-based Metals/Alloys	0.60
Other Metals	0.10
Other Inorganic Materials	2.40
Cellulosics	80.90
Rubber	7.30
Plastics	64.90
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.40E-04
Am-243	5.57E-07
Cm-244	1.32E-05
Cs-137	7.25E-01
Np-237	9.00E-06
Pu-238	2.88E-02
Pu-239	7.99E-05
Pu-240	2.00E-05
Pu-241	2.23E-03
Pu-242	7.63E-08
Pu-244	1.81E-14
Sr-90	6.88E-01
Th-229	1.21E-11
Th-230	1.70E-08
Th-232	4.38E-13
U-233	4.30E-09
U-234	5.13E-05
U-235	7.61E-07
U-236	7.22E-06
U-238	3.34E-09

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D035, D039, D040, F001, F002, F003, F005

TRUCON Code(s)

325

Waste Stream Description

This transuranic mixed waste has not yet been generated. Waste will be segregated to the extent possible (considering ALARA) into inorganic, organic and heterogeneous waste streams and packaged separately. Details of waste characteristics will be developed upon generation. This waste stream will not be moratorium waste.

Waste Stream ID: KN-B234TRU

Appendix A

TRU Waste Inventory Profile Report

Site	Knolls Atomic Power Laboratory - Nuclear Fuel Services	Final Waste Form	Soils	Waste Matrix Code	S4200	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Building 234 TRU Waste	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	1.7	145.6	147.3
Box - Crate	2.8	0.0	2.8
Current Form Total	4.5	145.6	150.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	4.6	145.6	150.2
Final Form Total	4.6	145.6	150.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	35.70
Aluminum-based Metals/Alloys	2.60
Other Metals	0.00
Other Inorganic Materials	33.60
Cellulosics	5.10
Rubber	0.30
Plastics	31.50
Cements	2270.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	68.60
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.27E-01
Np-237	3.62E-07
Pu-238	2.60E-02
Pu-239	8.10E-01
Pu-240	8.10E-01
Pu-241	9.43E-01
Th-229	1.36E-06
Th-230	4.50E-04
Th-232	1.50E-04
U-233	2.90E-03
U-234	2.90E-03
U-235	5.50E-04
U-236	5.50E-04
U-238	7.10E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)
111/211, 125/225

Waste Stream Description

This waste is non-hazardous debris and soil from Building 234. All process equipment and glove boxes were removed in the early 1990s and are not part of this waste stream. The debris consists of concrete block, metal, PPE, plywood, plexiglass, plastic, HEPA filters, piping, duct work, glass, cheese cloth, paper, rubber and small tools.

Waste Stream ID: **LA-CIN01.001**

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3150	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Cemented TRU Waste				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
110-gal Drum w/ 1 - 55-gal Drum w/ Liner	2.5	0.0	2.5
55-gal Drum Dir Ld w/ Liner	369.4	0.0	369.4
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	221.9	0.0	221.9
Cask - Misc w/ 1 - 30-gal Drum	0.4	0.0	0.4
Other	0.3	0.0	0.3
Current Form Total	594.5	0.0	594.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	514.2	0.0	514.2
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Final Form Total	516.1	0.0	516.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	447.19
Aluminum-based Metals/Alloys	1.39
Other Metals	41.24
Other Inorganic Materials	250.72
Cellulosics	28.48
Rubber	42.71
Plastics	254.32
Cements	0.00
Inorganic Matrix	785.22
Organic Matrix	598.08
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.88
Packaging Material, Plastic	36.87
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.41E+01
Am-243	7.70E-04
Cs-137	1.14E-09
Np-237	4.02E-04
Pu-238	1.94E+00
Pu-239	1.66E+01
Pu-240	4.47E+00
Pu-241	2.31E+01
Pu-242	6.02E-03
Pu-244	4.76E-09
Sr-90	1.12E-09
Th-229	4.90E-07
Th-230	1.32E-07
Th-232	4.47E-06
U-233	1.87E-04
U-234	6.06E-04
U-235	1.88E-05
U-236	4.47E-06
U-238	6.52E-04

Haz. Waste No(s).

D006, D007, D008, D011, D039, F001, F002, F003

TRUCON Code(s)

114/214, 126/226

Waste Stream Description

Cemented TRU waste is generated by or originated from materials used during recovery, fabrication, R&D, and associated maintenance operations.

Waste Stream ID: LA-CIN02.001

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3150	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Radioactive Aqueous Liquid Waste				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
110-gal Drum w/ 1 - 55-gal Drum w/ Liner	4.6	0.0	4.6
55-gal Drum Dir Ld w/ Liner	64.7	0.0	64.7
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	124.6	0.0	124.6
SWB w/ 4 - 55-gal Drums w/ Liners	279.7	0.0	279.7
Current Form Total	473.6	0.0	473.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	147.5	0.0	147.5
SWB w/ 4 - 55-gal Drums w/ Liners	279.7	0.0	279.7
Final Form Total	427.2	0.0	427.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.08
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.07
Cellulosics	0.00
Rubber	0.00
Plastics	5.16
Cements	0.00
Inorganic Matrix	1631.56
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	183.38
Packaging Material, Plastic	23.45
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.43E+00
Am-243	6.10E-06
Cs-137	2.50E-04
Np-237	2.89E-05
Pu-238	1.54E-01
Pu-239	1.73E+00
Pu-240	9.86E-02
Pu-241	2.49E-01
Pu-242	2.13E-05
Sr-90	6.41E-06
Th-229	1.23E-07
Th-230	1.29E-08
Th-232	5.67E-17
U-233	4.68E-05
U-234	5.79E-05
U-235	6.93E-06
U-236	8.20E-08
U-238	7.67E-08

Haz. Waste No(s).

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

TRUCON Code(s)

111/211, 114/214, 125/225

Waste Stream Description

Generation during the pretreatment of radioactive aqueous liquid waste that was piped to TA-50 from TA-55

Waste Stream ID: LA-LAMHDO3DD

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	REPACKAGED INTO THIS WASTE STREAM ARE FRP 55196, FRP 55194 AND PART OF B-25. Non-Plutonium Metals			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	12.23
Aluminum-based Metals/Alloys	0.00
Other Metals	4.07
Other Inorganic Materials	19.71
Cellulosics	15.82
Rubber	1.61
Plastics	46.56
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	211.10
Packaging Material, Plastic	16.30
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.94E-04
Np-237	5.57E-10
Pu-238	1.72E-02
Pu-239	9.34E-03
Pu-241	1.93E-02
Th-229	5.45E-19
Th-230	3.60E-12
U-233	4.49E-15
U-234	1.99E-07
U-235	3.69E-11

No Hazardous Waste Numbers Provided

TRUCON Code(s) 125/225

Waste Stream Description

REPACKAGED INTO THIS WASTE STREAM ARE FRP 55196, FRP 55194 AND PART OF B-25. Non-Plutonium Metals

Waste Stream ID: LA-LAMINO2V.001

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3120	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Mixed Inorganic Homogeneous Waste, Organics on Vermiculite.			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.3	4.4	6.7
Current Form Total	2.3	4.4	6.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.3	4.4	6.7
Final Form Total	2.3	4.4	6.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	129.82
Aluminum-based Metals/Alloys	0.37
Other Metals	14.44
Other Inorganic Materials	75.83
Cellulosics	20.74
Rubber	12.80
Plastics	67.99
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	159.88
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.70E-01
Np-237	2.45E-07
Pu-238	7.15E-02
Pu-239	2.50E+00
Pu-240	5.94E-01
Pu-241	7.45E+00
Pu-242	3.36E-05
Th-229	1.45E-16
Th-230	8.34E-12
Th-232	3.91E-18
U-233	1.56E-12
U-234	6.16E-07
U-235	7.40E-09
U-236	5.28E-08
U-238	1.52E-14

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D028, D035, D038, D039, D040, F001, F002, F003, F005, U003, U044, U196

TRUCON Code(s)

112/212

Waste Stream Description

Mixed Inorganic Homogeneous Waste, Organics on Vermiculite.

Waste Stream ID: **LA-LAMINO4S**

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	INORGANIC HOMOGENEOUS WASTE			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	10.2	33.1	43.3
55-gal POC - 12" w/ Liner	4.4	0.0	4.4
Current Form Total	14.6	33.1	47.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	10.2	33.1	43.3
55-gal POC - 12" w/ Liner	4.4	0.0	4.4
Final Form Total	14.6	33.1	47.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.26
Cements	0.00
Inorganic Matrix	48.02
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	167.17
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	12.61
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.79E+00
Np-237	4.58E-06
Pu-238	3.92E-01
Pu-239	9.62E+00
Pu-240	2.48E+00
Pu-241	3.55E+01
Pu-242	1.11E-03
Pu-244	5.02E-10
Th-229	2.78E-15
Th-230	4.58E-11
Th-232	1.63E-17
U-233	2.98E-11
U-234	3.38E-06
U-235	2.84E-08
U-236	2.21E-07
U-238	5.05E-13

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

TRUCON Code(s)

124/224

Waste Stream Description

INORGANIC HOMOGENEOUS WASTE

Waste Stream ID: LA-LA-NCD01

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Non-Mixed Combustible Debris Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.8	45.6	46.4
Current Form Total	0.8	45.6	46.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.8	45.6	46.4
Final Form Total	0.8	45.6	46.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	55.72
Aluminum-based Metals/Alloys	0.17
Other Metals	5.14
Other Inorganic Materials	31.24
Cellulosics	3.55
Rubber	5.32
Plastics	31.69
Cements	0.00
Inorganic Matrix	0.68
Organic Matrix	74.52
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.38E-02
Np-237	1.64E-08
Pu-238	3.48E-03
Pu-239	1.23E-01
Pu-240	2.92E-02
Pu-241	3.49E-01
Pu-242	1.65E-06
Th-229	1.66E-17
Th-230	7.27E-13
Th-232	3.42E-19
U-233	1.35E-13
U-234	4.02E-08
U-235	4.85E-10
U-236	3.46E-09
U-238	9.96E-16

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

Non-Mixed Combustible Debris Waste

Waste Stream ID: LA-LANHD01

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	NON-MIXED HETEROGENEOUS DEBRIS WASTE			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.6	28.1	28.7
Current Form Total	0.6	28.1	28.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.6	28.1	28.7
Final Form Total	0.6	28.1	28.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	133.16
Aluminum-based Metals/Alloys	0.41
Other Metals	12.28
Other Inorganic Materials	74.66
Cellulosics	8.48
Rubber	12.72
Plastics	0.00
Cements	0.00
Inorganic Matrix	1.63
Organic Matrix	178.09
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.27E-02
Np-237	1.22E-07
Pu-238	3.55E-03
Pu-239	1.42E-01
Pu-240	3.37E-02
Pu-241	1.87E-01
Pu-242	1.91E-06
Th-229	2.88E-15
Th-230	2.02E-11
Th-232	9.88E-18
U-233	4.85E-12
U-234	2.18E-07
U-235	2.81E-09
U-236	2.00E-08
U-238	5.76E-15

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

NON-MIXED HETEROGENEOUS DEBRIS WASTE

Waste Stream ID: **LA-LANHD02238**

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	NON-MIXED HETEROGENEOUS DEBRIS WASTE, PU238			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.3	234.4	236.7
Current Form Total	2.3	234.4	236.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.3	234.4	236.7
Final Form Total	2.3	234.4	236.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	23.34
Aluminum-based Metals/Alloys	0.07
Other Metals	2.15
Other Inorganic Materials	13.09
Cellulosics	1.49
Rubber	2.23
Plastics	13.28
Cements	0.00
Inorganic Matrix	0.29
Organic Matrix	31.22
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.77E-04
Np-237	3.53E-09
Pu-238	1.37E+00
Pu-239	8.68E-04
Pu-240	4.13E-04
Pu-241	1.47E-02
Pu-242	3.22E-07
Th-229	3.98E-17
Th-230	3.69E-09
Th-232	5.93E-20
U-233	9.65E-14
U-234	5.75E-05
U-235	1.20E-11
U-236	1.71E-10
U-238	6.80E-16

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

NON-MIXED HETEROGENEOUS DEBRIS WASTE, PU238

Waste Stream ID: LA-LANINO3NC

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	NON-CEMENTED SOLID INORGANIC (HOMOGENEOUS)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	33.3	115.2	148.5
55-gal POC - 12" w/ Liner	8.9	0.0	8.9
Current Form Total	42.2	115.2	157.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	33.3	115.2	148.5
55-gal POC - 12" w/ Liner	8.9	0.0	8.9
Final Form Total	42.2	115.2	157.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	112.25
Aluminum-based Metals/Alloys	0.35
Other Metals	10.35
Other Inorganic Materials	62.93
Cellulosics	7.15
Rubber	10.72
Plastics	63.84
Cements	0.00
Inorganic Matrix	1.38
Organic Matrix	150.12
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.33
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	7.81
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.55E+00
Am-243	5.89E-04
Np-237	1.77E-04
Pu-238	6.18E+00
Pu-239	8.76E+00
Pu-240	2.21E+00
Pu-241	3.03E+01
Pu-242	1.79E-04
Th-229	3.23E-13
Th-230	7.21E-10
Th-232	1.45E-17
U-233	2.30E-09
U-234	5.32E-05
U-235	2.59E-08
U-236	1.96E-07
U-238	8.08E-14

Haz. Waste No(s).

D005, D006, D007, D008, D009, D010, D011

TRUCON Code(s)

122/222, 124/224

Waste Stream Description

NON-CEMENTED SOLID INORGANIC (HOMOGENEOUS)

Waste Stream ID: LA-MHD01.001

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Debris waste includes paper, rags, plastic, rubber, wood-based HEPA filters			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
110-gal Drum w/ 1 - 55-gal Drum w/ Liner	2.5	0.0	2.5
30-gal Drum	0.1	0.0	0.1
55-gal Drum Dir Ld w/ Liner	1939.0	0.0	1939.0
55-gal POC - 12" w/ Liner	13.5	0.0	13.5
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	540.6	0.0	540.6
Box - Crate	19.0	0.0	19.0
Box - FRP	1.1	0.0	7.2
Other	1.2	0.0	8.2
SWB w/ 4 - 55-gal Drums w/ Liners	189.0	0.0	189.0
Current Form Total	2719.1	0.0	2719.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2289.7	0.0	2289.7
55-gal POC - 12" w/ Liner	13.5	0.0	13.5
SWB Dir Ld w/ Liner	28.4	0.0	28.4
SWB w/ 4 - 55-gal Drums w/ Liners	189.0	0.0	189.0
Final Form Total	2520.5	0.0	2520.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	64.11
Aluminum-based Metals/Alloys	0.21
Other Metals	8.34
Other Inorganic Materials	41.37
Cellulosics	12.17
Rubber	7.36
Plastics	41.93
Cements	0.00
Inorganic Matrix	48.14
Organic Matrix	91.94
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	139.20
Packaging Material, Plastic	35.05
Packaging Material, Cellulosics	0.74
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.17E+00
Am-243	1.21E-04
Cm-244	6.25E-04
Cs-137	2.23E-07
Np-237	8.39E-05
Pu-238	1.20E+01
Pu-239	8.58E+00
Pu-240	2.26E+00
Pu-241	9.42E+00
Pu-242	1.24E-02
Pu-244	3.32E-09
Sr-90	2.12E-07
Th-229	3.56E-07
Th-230	5.17E-07
Th-232	1.44E-15
U-233	1.36E-04
U-234	2.57E-03
U-235	3.28E-06
U-236	1.98E-06
U-238	1.57E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D028, D035, D038, D039, D040, F001, F002, F003, F005, F006, P120

TRUCON Code(s)

115/215, 116/216, 117/217, 118/218, 119/219, 123/223, 125/225

Waste Stream Description

Debris waste includes paper, rags, plastic, rubber, wood-based HEPA filters

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: LA-MHD01.001-S

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-LA-MHD01.001	233.8
55-gal Drum Dir Ld w/o Liner	WP-LA-MHD01.001	309.5
SWB w/ 4 - 55-gal Drums w/ Liners	WP-LA-MHD01.001	512.2
SWB w/ 4 - 55-gal Drums w/o Liners	WP-LA-MHD01.001	51.0
Shipped Total		1106.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	65.72
Aluminum-based Metals/Alloys	0.16
Other Metals	6.78
Other Inorganic Materials	33.60
Cellulosics	8.24
Rubber	7.31
Plastics	27.78
Cements	0.00
Inorganic Matrix	0.66
Organic Matrix	0.02
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.64E+00
Am-243	8.24E-04
Cm-244	3.99E-03
Cs-137	1.17E-06
Np-237	1.86E-04
Pu-238	1.65E+01
Pu-239	1.00E+01
Pu-240	2.66E+00
Pu-241	2.58E+01
Pu-242	1.84E-03
Sr-90	8.83E-04
Th-229	5.08E-08
Th-230	7.69E-06
Th-232	4.08E-09
U-233	5.42E-04
U-234	2.68E-03
U-235	3.60E-06
U-236	7.89E-08
U-238	5.39E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: LA-MHD02.001-S

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-LA-MHD02.001	5.0
55-gal Drum Dir Ld w/o Liner	WP-LA-MHD02.001	8.5
Shipped Total		13.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	78.72
Aluminum-based Metals/Alloys	0.00
Other Metals	3.17
Other Inorganic Materials	17.11
Cellulosics	3.40
Rubber	25.27
Plastics	31.33
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.32E-01
Am-243	2.96E-06
Cs-137	1.76E-07
Np-237	6.16E-06
Pu-238	1.31E+02
Pu-239	1.03E-01
Pu-240	5.19E-02
Pu-241	4.80E-01
Pu-242	5.31E-05
Sr-90	1.76E-07
Th-229	1.77E-11
Th-230	2.22E-07
Th-232	3.80E-20
U-233	1.89E-07
U-234	2.49E-02
U-235	4.68E-08
U-236	1.54E-09
U-238	8.01E-15

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: LA-MHD03.001

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	MIXED HETEROGENEOUS DEBRIS WASTE, D&D, COMBUSTIBLE/NON COMBUSTIBLE			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
110-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.8	0.0	0.8
30-gal Drum	4.5	0.0	4.5
55-gal Drum Dir Ld w/ Liner	457.0	0.0	457.0
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	102.7	0.0	102.7
Box - Cardboard	0.0	0.0	0.0
Cask - Misc w/ 1 - 30-gal Drum	0.8	0.0	0.8
Other	0.0	0.0	1.5
SWB w/ 4 - 55-gal Drums w/ Liners	62.4	0.0	62.4
Current Form Total	629.7	0.0	629.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	532.7	0.0	532.7
SWB Dir Ld w/ Liner	1.9	0.0	1.9
SWB w/ 4 - 55-gal Drums w/ Liners	62.4	0.0	62.4
Final Form Total	596.9	0.0	596.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	25.02
Aluminum-based Metals/Alloys	0.02
Other Metals	6.96
Other Inorganic Materials	34.37
Cellulosics	25.40
Rubber	3.09
Plastics	39.75
Cements	0.00
Inorganic Matrix	1.07
Organic Matrix	7.57
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	139.26
Packaging Material, Plastic	34.72
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.79E-01
Am-243	1.07E-04
Cm-244	9.75E-02
Cs-137	2.94E-05
Np-237	1.43E-04
Pu-238	2.38E+00
Pu-239	8.89E-01
Pu-240	2.16E-01
Pu-241	1.03E+00
Pu-242	2.50E-04
Pu-244	2.17E-10
Sr-90	2.90E-04
Th-229	5.54E-08
Th-230	1.03E-07
Th-232	1.84E-11
U-233	2.19E-05
U-234	5.21E-04
U-235	1.13E-05
U-236	3.33E-07
U-238	2.35E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D021, D022, D027, D028, D029, D030, D032, D033, D034, D035, D036, D039, D040, D043, F001, F002, F003, F004, F005, F006, F007, F009, U003, U103, U108

TRUCON Code(s)

116/216, 117/217, 118/218, 119/219, 125/225

Waste Stream Description

MIXED HETEROGENEOUS DEBRIS WASTE, D&D, COMBUSTIBLE/NON COMBUSTIBLE

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: LA-MHD03.001-S

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-LA-MHD03.001	5.4
55-gal Drum Dir Ld w/o Liner	WP-LA-MHD03.001	182.8
SWB w/ 4 - 55-gal Drums w/ Liners	WP-LA-MHD03.001	1.9
SWB w/ 4 - 55-gal Drums w/o Liners	WP-LA-MHD03.001	1.9
Shipped Total		192.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	13.41
Aluminum-based Metals/Alloys	0.05
Other Metals	1.65
Other Inorganic Materials	27.40
Cellulosics	20.43
Rubber	1.56
Plastics	56.45
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.18E-01
Am-243	1.22E-04
Cm-244	1.38E-03
Cs-137	2.29E-05
Np-237	6.96E-05
Pu-238	3.70E+00
Pu-239	6.55E-01
Pu-240	1.78E-01
Pu-241	2.45E+00
Pu-242	7.63E-05
Sr-90	2.27E-05
Th-229	6.95E-09
Th-230	4.50E-09
Th-232	1.30E-19
U-233	7.41E-05
U-234	5.05E-04
U-235	5.63E-07
U-236	5.28E-09
U-238	9.77E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D026, D027, D028, D029, D030, D035, D036, D037, D038, D039, D040, D043, F001, F002, F004, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: LA-MHD04.001

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Mixed heterogeneous combustible and noncombustible debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
110-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.8	0.0	0.8
30-gal Drum	0.1	0.0	0.1
55-gal Drum Dir Ld w/ Liner	4.6	0.0	4.6
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	2.6	0.0	2.6
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Current Form Total	10.0	0.0	10.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	6.9	0.0	6.9
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	8.8	0.0	8.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	29.81
Aluminum-based Metals/Alloys	11.37
Other Metals	22.85
Other Inorganic Materials	6.49
Cellulosics	19.37
Rubber	14.96
Plastics	11.13
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	148.14
Packaging Material, Plastic	32.53
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.11E-01
Am-243	9.06E-06
Cs-137	7.54E-09
Np-237	1.75E-05
Pu-238	9.42E+01
Pu-239	1.21E-01
Pu-240	6.27E-02
Pu-241	2.65E-01
Pu-242	7.63E-05
Sr-90	7.36E-09
Th-229	3.71E-12
Th-230	2.86E-06
Th-232	5.01E-17
U-233	2.43E-09
U-234	1.44E-02
U-235	3.94E-09
U-236	6.15E-08
U-238	3.80E-13

Haz. Waste No(s).

D008, F001, F002

TRUCON Code(s)

125/225

Waste Stream Description

Mixed heterogeneous combustible and noncombustible debris

Waste Stream ID: LA-MIN03-NC.001

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	MIXED INORGANIC HOMOGENEOUS WASTE, NONCEMENTED			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
110-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.4	0.0	0.4
55-gal Drum Dir Ld w/ Liner	800.6	0.0	800.6
55-gal POC - 12" w/ Liner	0.6	0.0	0.6
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	470.1	0.0	470.1
Current Form Total	1271.8	0.0	1271.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1104.5	0.0	1104.5
55-gal POC - 12" w/ Liner	0.6	0.0	0.6
Final Form Total	1105.1	0.0	1105.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.08
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.07
Cellulosics	0.00
Rubber	0.00
Plastics	4.76
Cements	0.00
Inorganic Matrix	1506.77
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	131.02
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.08
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.95E-01
Am-243	6.63E-06
Cs-137	1.31E-05
Np-237	1.34E-06
Pu-238	5.05E-02
Pu-239	3.72E-01
Pu-240	1.58E-02
Pu-241	2.61E-01
Pu-242	1.88E-06
Sr-90	1.31E-05
Th-229	2.52E-08
Th-230	1.31E-09
Th-232	4.62E-20
U-233	8.87E-07
U-234	2.66E-05
U-235	7.46E-07
U-236	9.36E-10
U-238	5.78E-07

Haz. Waste No(s).

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

TRUCON Code(s)

111/211, 122/222, 124/224

Waste Stream Description

MIXED INORGANIC HOMOGENEOUS WASTE, NONCEMENTED

Waste Stream ID: LA-MIN03-NC.001-S

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3120	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-LA-MIN03-NC.001	353.4
55-gal Drum Dir Ld w/o Liner	WP-LA-MIN03-NC.001	0.4
SWB w/ 4 - 55-gal Drums w/ Liners	WP-LA-MIN03-NC.001	13.2
Shipped Total		367.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	2.67
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.46
Cellulosics	0.00
Rubber	0.00
Plastics	4.16
Cements	0.00
Inorganic Matrix	736.72
Organic Matrix	4.75
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.67E-01
Am-243	1.50E-06
Cs-137	1.17E-04
Np-237	5.96E-06
Pu-238	2.13E-02
Pu-239	3.80E-01
Pu-240	5.55E-02
Pu-241	9.34E-01
Pu-242	4.48E-05
Sr-90	9.68E-05
Th-229	4.95E-14
Th-230	3.09E-10
Th-232	4.07E-20
U-233	5.41E-10
U-234	3.44E-05
U-235	8.76E-07
U-236	1.65E-09
U-238	4.80E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D037, F001, F002, F004, F005, F006, F007, F009

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: LA-OS-00-01.001

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5111	Handling	CH
Source Cat.	Discarding Excess/Expired Materials	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Metal debris from Off-Site Source Recovery (OSR) project (non-mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
55-gal POC - 12" w/ Liner	75.9	0.0	75.9
55-gal POC - 6" w/ Liner	130.8	0.0	130.8
Current Form Total	207.0	0.0	207.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
55-gal POC - 12" w/ Liner	75.9	0.0	75.9
55-gal S100 POC - 6" w/ Liner	130.8	0.0	130.8
Final Form Total	207.0	0.0	207.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	40.71
Aluminum-based Metals/Alloys	0.10
Other Metals	5.78
Other Inorganic Materials	31.68
Cellulosics	12.96
Rubber	4.19
Plastics	33.67
Cements	0.00
Inorganic Matrix	0.79
Organic Matrix	43.17
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	396.33
Packaging Material, Plastic	464.34
Packaging Material, Cellulosics	94.50
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.68E+01
Am-243	2.01E-06
Cs-137	1.83E-02
Np-237	1.52E-04
Pu-238	4.16E+01
Pu-239	3.22E+00
Pu-240	8.94E-01
Pu-241	1.67E+00
Pu-242	2.03E-04
Pu-244	1.90E-10
Sr-90	1.47E-06
Th-229	8.80E-13
Th-230	4.14E-08
Th-232	3.21E-17
U-233	2.87E-09
U-234	1.08E-03
U-235	2.23E-08
U-236	1.86E-07
U-238	1.21E-11

Haz. Waste No(s).

F001, F002

TRUCON Code(s)

120/220

Waste Stream Description

Off-Site Source Recovery (OSR) sealed sources are radionuclide (actinide) solids (e.g., Am, Pu, AmBe, or PuBe) that are encapsulated in metal jackets. The actinides are either metal or metal oxides.

Waste Stream ID: LA-OS-00-01.001-S

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5100	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	WP-LA-OS-00-01.001	60.9
55-gal S100 POC - 6" w/ Liner	WP-LA-OS-00-01.001	21.6
Shipped Total		82.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	19.23
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.80E+00
Cs-137	1.84E-03
Np-237	2.85E-06
Pu-238	8.13E+01
Pu-239	8.43E+00
Pu-240	2.53E+00
Pu-241	8.19E+00
Pu-242	6.89E-04
Sr-90	2.24E-02
Th-229	3.45E-13
Th-230	6.32E-08
Th-232	1.85E-18
U-233	3.69E-09
U-234	7.15E-03
U-235	3.59E-07
U-236	7.50E-08
U-238	1.19E-08

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: LA-OS-00-01-S

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5100	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/o Liner	WP-LA-OS-00-01	0.4
Shipped Total		0.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	130.77
Aluminum-based Metals/Alloys	0.00
Other Metals	0.96
Other Inorganic Materials	0.00
Cellulosics	137.50
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.32E+00
Cs-137	6.18E-04
Np-237	3.85E-05
Pu-238	4.16E+00
Pu-239	1.15E+01
Pu-240	1.17E+01
Pu-241	1.34E+01
Pu-242	2.32E-04
Sr-90	5.77E-04
Th-229	1.59E-13
Th-230	2.24E-01
Th-232	2.14E-16
U-233	7.13E-10
U-234	6.03E-05
U-235	5.67E-08
U-236	1.73E-06
U-238	1.75E-13

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: LA-OS-00-03

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5111	Handling	CH
Source Cat.	Discarding Excess/Expired Materials	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Metal debris from Off-Site Source Recovery (OSR) project (non-mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	57.8	0.0	57.8
Current Form Total	57.8	0.0	57.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	57.8	0.0	57.8
Final Form Total	57.8	0.0	57.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	974.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.40E-01
Np-237	1.00E-06
Th-229	3.31E-15
U-233	1.51E-11

No Hazardous Waste Numbers Provided

TRUCON Code(s)
120/220

Waste Stream Description

Off-Site Source Recovery (OSR) sealed sources are radionuclide (actinide) solids (e.g., Am, Pu, AmBe, or PuBe) that are encapsulated in metal jackets. The actinides are either metal or metal oxides.

Waste Stream ID: LA-PX-00-01

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5300	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combustible debris waste generated by PANTEX			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	257.70
Aluminum-based Metals/Alloys	0.40
Other Metals	18.80
Other Inorganic Materials	6.80
Cellulosics	64.00
Rubber	1.10
Plastics	5.30
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.70E-02
Np-237	5.62E-08
Pu-238	7.62E-03
Pu-239	8.92E-02
Pu-240	2.10E-02
Pu-241	1.27E-01
Th-229	4.39E-16
Th-230	1.25E-11
Th-232	1.86E-18
U-233	1.30E-12
U-234	2.48E-07
U-235	9.68E-10
U-236	6.85E-09

No Hazardous Waste Numbers Provided

TRUCON Code(s)
116/216

Waste Stream Description

Not provided

Waste Stream ID: LA-TA-00-01

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Containers waiting assignment to waste streams			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	21.6	0.0	21.6
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	2.6	0.0	2.6
Box - Cardboard	0.0	0.0	0.2
Box - Crate	0.1	0.0	119.5
Box - FRP	2.3	0.0	147.5
Other	0.0	0.0	14.8
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Current Form Total	308.1	0.0	308.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	23.7	0.0	23.7
SWB Dir Ld w/ Liner	170.1	0.0	170.1
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	195.7	0.0	195.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	12.45
Aluminum-based Metals/Alloys	0.01
Other Metals	3.69
Other Inorganic Materials	18.10
Cellulosics	13.81
Rubber	1.57
Plastics	27.57
Cements	0.00
Inorganic Matrix	0.05
Organic Matrix	2.50
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	151.31
Packaging Material, Plastic	5.68
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.76E-01
Am-243	4.22E-05
Cm-244	1.18E-01
Cs-137	1.97E-09
Np-237	2.94E-05
Pu-238	2.11E+00
Pu-239	5.37E-01
Pu-240	1.03E-01
Pu-241	3.73E-01
Pu-242	5.36E-04
Pu-244	5.47E-07
Sr-90	1.92E-09
Th-229	2.10E-08
Th-230	4.22E-08
Th-232	5.68E-10
U-233	6.24E-06
U-234	2.49E-04
U-235	1.91E-08
U-236	1.10E-07
U-238	3.93E-07

Haz. Waste No(s).

D008, F001, F002

TRUCON Code(s)

111/211, 122/222, 125/225

Waste Stream Description

Miscellaneous Containers waiting assignment to waste streams

Waste Stream ID: **LA-TA-00-03**

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	RH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Containers waiting assignment to waste streams			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Canister - (LANL-RH)	2.1	0.0	2.1
Current Form Total	2.1	0.0	2.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Fxd Lid - Dir Ld	0.9	0.0	0.9
Final Form Total	0.9	0.0	0.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1310.00
Aluminum-based Metals/Alloys	5.30
Other Metals	157.00
Other Inorganic Materials	848.00
Cellulosics	108.00
Rubber	162.00
Plastics	501.00
Cements	0.00
Inorganic Matrix	20.80
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	433.70
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	464.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-239	1.39E+01
U-235	4.94E-07

Haz. Waste No(s).

D008

No TRUCON Codes Provided

Waste Stream Description

Miscellaneous Containers waiting assignment to waste streams

Waste Stream ID: LA-TA-03-01

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Organics	Waste Matrix Code	S3200	Handling	CH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Solidified Organics	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.04
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.04
Cellulosics	0.00
Rubber	0.00
Plastics	1.95
Cements	0.00
Inorganic Matrix	366.60
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.80E-01
Np-237	3.23E-05
Pu-238	2.48E-02
Pu-239	8.91E-01
Pu-240	2.11E-01
Pu-241	2.30E+00
Pu-242	1.20E-05
Th-229	2.32E-13
Th-230	1.18E-11
Th-232	5.57E-18
U-233	8.27E-10
U-234	4.33E-07
U-235	5.27E-09
U-236	3.76E-08
U-238	1.08E-14

Haz. Waste No(s).

D006, D008, D009, D011, D019, D021, F001, F002, F005

TRUCON Code(s)

112/212

Waste Stream Description

Solidified Organics

Waste Stream ID: LA-TA-03-09

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	NonCombustible	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Other	11.3	0.0	11.3
Current Form Total	11.9	0.0	11.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
SWB Dir Ld w/ Liner	7.6	0.0	7.6
Final Form Total	8.2	0.0	8.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	47.09
Aluminum-based Metals/Alloys	0.00
Other Metals	15.67
Other Inorganic Materials	75.89
Cellulosics	60.91
Rubber	6.20
Plastics	179.27
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	151.77
Packaging Material, Plastic	3.93
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.61E-01
Am-243	5.70E-04
Np-237	1.03E-05
Pu-238	7.54E-03
Pu-239	1.27E-02
Pu-240	3.02E-03
Pu-241	2.71E-02
Pu-242	1.71E-07
Th-229	2.01E-13
Th-230	1.01E-11
Th-232	2.21E-19
U-233	4.32E-10
U-234	2.23E-07
U-235	1.25E-10
U-236	8.95E-10
U-238	1.47E-06

Haz. Waste No(s).

D004, D006, D007, D008, D009, D010, D011, D019, D021, D022, D027, D030, D032, D034, F001, F002, F003, F004, F005

TRUCON Code(s)

117/217, 125/225

Waste Stream Description

NonCombustible

Waste Stream ID: LA-TA-03-10

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combined Combustible and NonCombustible			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1.5	41.2	42.6
Other	64.0	0.0	64.0
Current Form Total	65.5	41.2	106.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1.5	41.2	42.6
SWB Dir Ld w/ Liner	39.7	0.0	39.7
Final Form Total	41.1	41.2	82.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	19.91
Aluminum-based Metals/Alloys	0.00
Other Metals	6.63
Other Inorganic Materials	32.09
Cellulosics	25.76
Rubber	2.62
Plastics	75.81
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	141.74
Packaging Material, Plastic	19.74
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.35E-02
Am-243	5.83E-07
Cs-137	2.07E-08
Np-237	3.55E-06
Pu-238	4.20E-03
Pu-239	8.67E-02
Pu-240	2.06E-02
Pu-241	2.13E-01
Pu-242	1.20E-06
Sr-90	2.06E-08
Th-229	3.48E-14
Th-230	3.54E-10
Th-232	7.38E-19
U-233	1.06E-10
U-234	5.66E-06
U-235	2.20E-07
U-236	4.27E-09
U-238	2.02E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s) 125/225

Waste Stream Description

Combined Combustible and NonCombustible

Waste Stream ID: LA-TA-03-12

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combustible debris waste from chemistry operations in wings 3, 5, and 7 of the CMR facility (mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	15.34
Aluminum-based Metals/Alloys	0.00
Other Metals	5.11
Other Inorganic Materials	24.72
Cellulosics	19.84
Rubber	2.02
Plastics	58.40
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.55E-02
Np-237	6.46E-07
Pu-238	2.02E-02
Pu-239	9.10E-01
Pu-240	2.13E-01
Pu-241	5.71E-01
Pu-242	1.23E-05
Th-229	3.48E-14
Th-230	4.04E-10
Th-232	2.02E-16
U-233	3.82E-11
U-234	2.38E-06
U-235	3.23E-08
U-236	2.27E-07
U-238	6.69E-14

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Combustible waste generated from facility and equipment operations and maintenance. This waste includes paper, rags, plastic, rubber, wood-based HEPA filters, and plastic-based and cellulose-based waste generated at the facility. Plastic-based waste includes, but may not be limited to, tape, polyethylene and vinyl; gloves; plastic vials; polystyrene; Tygon tubing; polyvinyl chloride plastic; Teflon products; Plexiglas; and dry box gloves (unleaded neoprene base). Cellulose-based waste includes, but may not be limited to, rags, wood, paper, cardboard, laboratory coats and coveralls, booties and cotton gloves, and similar materials. The waste stream may also contain a smaller fraction of non-combustible solids (e.g., scrap metal, crucibles, metal lids, zippers, discarded tools) and a small fraction of homogenous solids, salts, leached solids, ash, hydroxide cakes, crucibles, impure oxides.

Waste Stream ID: LA-TA-03-14

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Metals and Miscellaneous Equipment Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Crate	0.7	0.0	19.8
Current Form Total	19.8	0.0	19.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	15.1	0.0	15.1
Final Form Total	15.1	0.0	15.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	25.19
Aluminum-based Metals/Alloys	0.00
Other Metals	8.38
Other Inorganic Materials	40.60
Cellulosics	32.59
Rubber	3.32
Plastics	95.90
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	1.82E-01
Pu-239	6.19E-02
Th-230	3.64E-09
U-234	2.15E-05
U-235	7.28E-06

Haz. Waste No(s).

D008

No TRUCON Codes Provided

Waste Stream Description

Metals and Miscellaneous Equipment Debris

Waste Stream ID: LA-TA-03-20

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combustible debris waste from chemistry and metallurgical operations			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1.0	0.0	1.0
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	1.3	0.0	1.3
Current Form Total	2.3	0.0	2.3

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	13.22
Aluminum-based Metals/Alloys	0.00
Other Metals	4.40
Other Inorganic Materials	21.31
Cellulosics	17.10
Rubber	1.74
Plastics	50.34
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.78E-01
Np-237	1.62E-05
Pu-238	2.09E+02
Pu-239	2.00E-01
Pu-240	9.53E-02
Pu-241	3.91E-01
Pu-242	9.16E-05
Th-229	2.64E-12
Th-230	1.08E-05
Th-232	6.29E-17
U-233	1.93E-09
U-234	4.98E-02
U-235	5.92E-09
U-236	8.49E-08
U-238	4.14E-13

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

Combustible debris waste from chemistry and metallurgical operations in wings 2 and 4 of the CMR facility (mixed). Combustible waste generated from facility and equipment operations and maintenance. This waste includes paper, rags, plastic, rubber, wood-based HEPA filters, and plastic-based and cellulose-based waste generated at the facility. Plastic-based waste includes, but may not be limited to, tape, polyethylene and vinyl; gloves; plastic vials; polystyrene; Tygon tubing; polyvinyl chloride plastic; Teflon products; Plexiglas; and dry box gloves (unleaded neoprene base). Cellulose-based waste includes, but may not be limited to, rags, wood, paper, cardboard, laboratory coats and coveralls, booties and cotton gloves, and similar materials. The waste stream may also contain a smaller fraction of non-combustible solids (e.g., scrap metal, crucibles, metal lids, zippers, discarded tools) and a small fraction of homogenous solids, salts, leached solids, ash, hydroxide cakes, crucibles, impure oxides.

Waste Stream ID: LA-TA-03-27

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combined combustible and noncombustible debris waste (RH-TRU) of the CMR facility			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
1-gal Drum	0.0	0.0	0.0
2-gal Drum	0.4	0.0	0.4
Canister - (LANL-RH)	0.1	0.0	93.6
Current Form Total	94.1	0.0	94.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid - Dir Ld	97.0	0.0	97.0
Final Form Total	97.0	0.0	97.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	260.60
Aluminum-based Metals/Alloys	0.00
Other Metals	249.93
Other Inorganic Materials	5.48
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	560.60
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.28E-02
Cs-137	1.61E+01
Np-237	1.27E-07
Pu-238	1.31E-02
Pu-239	2.40E+00
Pu-240	2.61E-02
Pu-241	2.46E-01
Pu-242	1.57E-05
Sr-90	1.44E+01
Th-229	3.99E-15
Th-230	4.67E-09
Th-232	1.31E-16
U-233	5.72E-12
U-234	1.91E-05
U-235	9.59E-05
U-236	1.05E-07
U-238	4.21E-07

Haz. Waste No(s).

D008

TRUCON Code(s)

117/217

Waste Stream Description

Combined combustible and noncombustible debris waste (RH-TRU) from wing 9 of the CMR facility (mixed). Combined Combustible and non-combustible remote handled waste (RH-TRU). This waste stream contains both combustible and non-combustible waste that is classified as "remotely handled". Combustible waste is generated from facility and equipment operations and maintenance. Combustible waste includes paper, rags, plastic, rubber, and plastic-based and cellulose-based waste generated at the facility. Plastic based waste includes, but may not be limited to, tape, polyethylene, and vinyl; gloves; plastic vials; polystyrene; Tygon tubing; polyvinyl chloride plastic; Teflon products; plexiglass; and dry box gloves (unleaded Neoprene base). Cellulose-based waste includes, but may not be limited to rags, wood, paper, cardboard, laboratory coats and coveralls, booties and cotton gloves, and similar materials. Noncombustible scrap waste is also generated from facility and equipment operations and maintenance. Noncombustible waste includes items such as small tools, cans, small equipment items, and broken glass. This waste consists of glass waste including, but not limited to, discarded labware, windows, and bottles; metal waste including motors, pumps, tools, and process equipment; leaded rubber, and metal waste including lead-lined glovebox gloves discarded along with metal waste, such as motors and tools.

Waste Stream ID: LA-TA-03-28

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3120	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Cement paste from CMR building (mixed)				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	4.0	0.0	4.0
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	3.2	0.0	3.2
Current Form Total	7.2	0.0	7.2

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.18
Aluminum-based Metals/Alloys	0.18
Other Metals	0.18
Other Inorganic Materials	0.18
Cellulosics	0.18
Rubber	0.18
Plastics	0.18
Cements	693.00
Inorganic Matrix	165.82
Organic Matrix	828.39
Soils/gravel	110.61
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.73E-02
Np-237	5.85E-07
Pu-238	4.67E-01
Pu-239	6.72E-01
Pu-240	1.27E-01
Pu-241	5.15E-01
Pu-242	1.77E-05
Th-229	3.14E-14
Th-230	7.74E-09
Th-232	1.02E-16
U-233	3.46E-11
U-234	5.00E-05
U-235	2.41E-08
U-236	1.25E-07
U-238	8.83E-14

Haz. Waste No(s).

D007, D019, F001, F002

TRUCON Code(s)

126/226

Waste Stream Description

Cement Past Solidified aqueous waste and cemented sludge generated from facility and equipment operations and maintenance. The sludge is a residue from numerous treatment and filtration operations involving aqueous liquid radioactive waste. This treatment produces a thin sludge (approximately 25 percent solids) that is alkaline and is compatible with Portland cement. Final cemented waste monoliths are produced by mixing the waste in 55-gallon steel drums containing empirically determined quantities of sludge, Portland cement, vermiculite, and sodium silicate.

Waste Stream ID: LA-TA-03-29

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Soils	Waste Matrix Code	S4100	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Plutonium contaminated soil (non-mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.3	0.0	0.3
Current Form Total	0.5	0.0	0.5

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.15
Aluminum-based Metals/Alloys	0.45
Other Metals	0.50
Other Inorganic Materials	0.18
Cellulosics	2.43
Rubber	1.27
Plastics	3.56
Cements	0.00
Inorganic Matrix	14.47
Organic Matrix	76.26
Soils/gravel	10.55
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.53E-01
Np-237	7.81E-07
Pu-238	4.43E+02
Pu-239	2.73E-01
Pu-240	1.07E-01
Pu-241	1.88E+00
Pu-242	7.67E-05
Th-229	2.09E-14
Th-230	4.39E-06
Th-232	5.29E-17
U-233	3.24E-11
U-234	3.63E-02
U-235	7.00E-09
U-236	8.24E-08
U-238	3.01E-13

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Plutonium Contaminated Soil Soils contaminated with transuranic material.

Waste Stream ID: LA-TA-03-30

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Organics	Waste Matrix Code	S3200	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Absorbed Organics on vermiculite (mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
30-gal Drum	0.1	0.0	0.1
SWB w/ 4 - 55-gal Drums w/ Liners	7.6	0.0	7.6
Current Form Total	7.7	0.0	7.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
SWB w/ 4 - 55-gal Drums w/ Liners	7.6	0.0	7.6
Final Form Total	7.8	0.0	7.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	195.07
Aluminum-based Metals/Alloys	0.29
Other Metals	14.44
Other Inorganic Materials	15.71
Cellulosics	48.37
Rubber	0.83
Plastics	4.01
Cements	124.06
Inorganic Matrix	110.70
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	208.95
Packaging Material, Plastic	16.85
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.15E-02
Am-243	1.89E-07
Cs-137	8.35E-07
Np-237	2.82E-07
Pu-238	8.82E-03
Pu-239	6.84E-03
Pu-240	2.17E-03
Pu-241	7.10E-03
Pu-242	1.25E-07
Th-229	4.44E-14
Th-230	1.46E-10
Th-232	1.73E-18
U-233	3.17E-11
U-234	9.44E-07
U-235	4.50E-08
U-236	2.12E-09
U-238	6.23E-16

Haz. Waste No(s).

D008, D009

TRUCON Code(s)

125/225

Waste Stream Description

Absorbed Organics on Vermiculite Organic liquids (solvents and oils) generated from facility and equipment operations and maintenance and absorbed on vermiculite.

Waste Stream ID: **LA-TA-03-31**

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Cemented inorganics, leached process solids (mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	43.30
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	508.10
Inorganic Matrix	453.40
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.32E-01
Np-237	1.82E-06
Pu-238	1.41E-01
Pu-239	5.71E+00
Pu-240	1.33E+00
Pu-241	7.02E+00
Pu-242	7.72E-05
Th-229	3.42E-14
Th-230	9.80E-10
Th-232	4.74E-16
U-233	6.30E-11
U-234	9.63E-06
U-235	1.24E-07
U-236	8.71E-07
U-238	2.56E-13

Haz. Waste No(s).

D008

No TRUCON Codes Provided

Waste Stream Description

Cemented Inorganics (Leached Process Solids) Solidified inorganic process solids generated from facility and equipment operations and maintenance. This waste consists of process leached solids, ash, filter cakes, salts, metal oxides, fines, and evaporator bottoms stabilized in Portland or gypsum cement.

Waste Stream ID: **LA-TA-03-33**

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Special Items Requiring Tracking by CST-7			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
30-gal Drum	0.1	0.0	0.1
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Current Form Total	2.0	0.0	2.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	2.1	0.0	2.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	5.37
Aluminum-based Metals/Alloys	0.00
Other Metals	1.79
Other Inorganic Materials	8.66
Cellulosics	6.95
Rubber	0.70
Plastics	20.45
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	203.14
Packaging Material, Plastic	18.35
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.30E-04
Cs-137	4.56E-07
Np-237	8.80E-05
Th-229	2.07E-11
Th-230	8.41E-14
U-233	1.30E-08
U-234	5.50E-10
U-238	5.72E-06

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

Special Items Requiring Tracking by CST-7

Waste Stream ID: LA-TA-03-34

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Inorganic Solid (Miscellaneous Glovebox Debris)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - FRP	1.2	0.0	16.0
Other	15.6	0.0	15.6
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Current Form Total	33.5	0.0	33.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	18.9	0.0	18.9
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	20.8	0.0	20.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	2.93
Aluminum-based Metals/Alloys	0.00
Other Metals	0.97
Other Inorganic Materials	4.72
Cellulosics	3.78
Rubber	0.38
Plastics	11.14
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	158.74
Packaging Material, Plastic	2.57
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.39E-04
Cs-137	6.20E-09
Np-237	3.07E-09
Pu-238	1.43E-01
Pu-239	1.85E-03
Pu-240	2.07E-04
Pu-241	1.39E-03
Pu-242	1.19E-08
Th-229	3.47E-17
Th-230	3.31E-10
Th-232	2.56E-20
U-233	8.58E-14
U-234	5.56E-06
U-235	1.28E-07
U-236	7.97E-11
U-238	2.96E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

Inorganic Solid (Miscellaneous Glovebox Debris)

Waste Stream ID: LA-TA-03-40

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Metals debris generated from D&D activities in CMR Building			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Crate	0.1	0.0	27.9
Current Form Total	27.9	0.0	27.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	17.0	0.0	17.0
Final Form Total	17.0	0.0	17.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	272.38
Aluminum-based Metals/Alloys	0.00
Other Metals	30.28
Other Inorganic Materials	6.79
Cellulosics	63.95
Rubber	1.10
Plastics	5.20
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	3.28E-02
Pu-239	4.45E-01
Th-230	3.52E-10
U-234	2.80E-06
U-235	1.82E-06

Haz. Waste No(s).

D008

No TRUCON Codes Provided

Waste Stream Description

Metals debris generated from decontamination and decommissioning activities in Wings 2, 3, 4, and 7 of CMR Building (mix). This waste consists mostly of metals or metal equipment, either whole or sectioned, and small volumes of combustibles generated during decommissioning, sectioning, and packaging. The waste forms primarily include gloveboxes, tools, cans, motors, pumps, decommissioned process equipment, and ductwork

Waste Stream ID: LA-TA-03-42

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	HEPA filter debris waste from wings 2, 3, 4, 5, and 7 of CMR Building (mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Crate	3.6	0.0	57.5
Box - FRP	16.0	0.0	34.1
Current Form Total	91.7	0.0	91.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	56.7	0.0	56.7
Final Form Total	56.7	0.0	56.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	258.31
Aluminum-based Metals/Alloys	0.00
Other Metals	291.75
Other Inorganic Materials	6.80
Cellulosics	2.62
Rubber	0.04
Plastics	0.22
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.11E-05
Np-237	2.86E-10
Pu-238	2.17E-03
Pu-239	1.06E-02
Pu-240	1.40E-04
Pu-241	5.52E-04
Pu-242	8.10E-09
Th-229	8.94E-18
Th-230	2.51E-11
Th-232	8.05E-20
U-233	1.28E-14
U-234	1.93E-07
U-235	2.93E-10
U-236	1.16E-10
U-238	3.42E-17

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

HEPA filter waste generated from facility and equipment operations and maintenance. A small fraction of combustible waste, such as plastics (mainly packaging), may also be present in this waste stream.

Waste Stream ID: LA-TA-21-05

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Graphite				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
30-gal Drum	0.1	0.0	0.1
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Current Form Total	0.3	0.0	0.3

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	103.90
Aluminum-based Metals/Alloys	0.42
Other Metals	12.45
Other Inorganic Materials	67.36
Cellulosics	8.60
Rubber	12.89
Plastics	39.77
Cements	0.00
Inorganic Matrix	1.66
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.46E-01
Np-237	1.73E-06
Pu-238	6.02E-02
Pu-239	2.53E+00
Pu-240	6.03E-01
Pu-241	1.84E+00
Pu-242	4.05E-05
Th-229	8.24E-14
Th-230	1.06E-09
Th-232	5.11E-16
U-233	9.62E-11
U-234	6.66E-06
U-235	4.77E-05
U-236	6.08E-07
U-238	2.08E-13

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Graphite

Waste Stream ID: LA-TA-21-06

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combustible debris waste (mixed)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
30-gal Drum	16.5	0.0	16.5
55-gal Drum Dir Ld w/ Liner	185.1	0.0	185.1
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	1.0	0.0	1.0
Cask - Misc w/ 1 - 30-gal Drum	3.2	0.0	81.4
Current Form Total	284.0	0.0	284.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	233.8	0.0	233.8
Final Form Total	233.8	0.0	233.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	28.21
Aluminum-based Metals/Alloys	10.76
Other Metals	21.62
Other Inorganic Materials	6.15
Cellulosics	18.33
Rubber	14.16
Plastics	10.54
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.55E-01
Am-243	2.03E-08
Np-237	1.17E-06
Pu-238	6.01E+01
Pu-239	8.70E-01
Pu-240	2.64E-01
Pu-241	1.16E+00
Pu-242	4.82E-05
Th-229	6.86E-14
Th-230	1.11E-06
Th-232	2.24E-16
U-233	7.12E-11
U-234	6.81E-03
U-235	4.01E-06
U-236	2.66E-07
U-238	2.47E-13

Haz. Waste No(s).

F001, F002

No TRUCON Codes Provided

Waste Stream Description

Combustible waste generated from facility and equipment operations and maintenance. This waste includes paper, rags, plastic, rubber, wood-based HEPA filters, and plastic-based and cellulose-based waste generated at the facility. Plastic-based waste includes, but may not be limited to, tape, polyethylene and vinyl; gloves; plastic vials; polystyrene; Tygon tubing; polyvinyl chloride plastic; Teflon products; Plexiglas; and dry box gloves (unleaded neoprene base). Cellulose-based waste includes, but may not be limited to, rags, wood, paper, cardboard, laboratory coats and coveralls, booties and cotton gloves, and similar materials. The waste stream may also contain a smaller fraction of non-combustible solids (e.g., scrap metal, crucibles, metal lids, zippers, discarded tools) and a small fraction of homogenous solids, salts, leached solids, ash, hydroxide cakes, crucibles, impure oxides.

Waste Stream ID: LA-TA-21-07

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Metal	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
2-gal Drum	0.0	0.0	0.0
30-gal Drum	6.4	0.0	6.4
55-gal Drum Dir Ld w/ Liner	67.2	0.0	67.2
Box - Crate	0.6	0.0	488.2
Box - FRP	14.2	0.0	14.2
Cask - Misc w/ 1 - 30-gal Drum	0.1	0.0	47.8
Other	0.0	0.0	70.9
Current Form Total	694.8	0.0	694.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	91.1	0.0	91.1
55-gal POC - 12" w/ Liner	0.2	0.0	0.2
SWB Dir Ld w/ Liner	207.9	0.0	207.9
Final Form Total	299.2	0.0	299.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	39.44
Aluminum-based Metals/Alloys	15.04
Other Metals	30.23
Other Inorganic Materials	8.59
Cellulosics	25.63
Rubber	19.80
Plastics	14.73
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	146.85
Packaging Material, Plastic	12.13
Packaging Material, Cellulosics	0.10
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.87E-02
Am-243	1.44E-14
Np-237	4.44E-07
Pu-238	3.53E+01
Pu-239	6.82E-01
Pu-240	1.31E-01
Pu-241	3.92E-01
Pu-242	1.14E-05
Th-229	2.39E-14
Th-230	7.08E-07
Th-232	1.25E-16
U-233	2.62E-11
U-234	4.17E-03
U-235	1.25E-07
U-236	1.40E-07
U-238	6.70E-06

Haz. Waste No(s).

D008

No TRUCON Codes Provided

Waste Stream Description

Metal

Waste Stream ID: LA-TA-21-08

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Glass				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
30-gal Drum	0.3	0.0	0.3
55-gal Drum Dir Ld w/ Liner	2.1	0.0	2.1
Cask - Misc w/ 1 - 30-gal Drum	1.1	0.0	1.1
Current Form Total	3.6	0.0	3.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.9	0.0	2.9
Final Form Total	2.9	0.0	2.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	19.31
Aluminum-based Metals/Alloys	7.36
Other Metals	14.80
Other Inorganic Materials	4.21
Cellulosics	12.55
Rubber	9.69
Plastics	7.21
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.39E-01
Np-237	9.83E-07
Pu-238	3.08E+01
Pu-239	9.16E-01
Pu-240	2.58E-01
Pu-241	1.04E+00
Pu-242	3.85E-05
Th-229	4.67E-14
Th-230	5.45E-07
Th-232	2.19E-16
U-233	5.45E-11
U-234	3.41E-03
U-235	3.07E-08
U-236	2.61E-07
U-238	1.97E-13

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Glass

Waste Stream ID: LA-TA-21-09

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Hepa Filters	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
30-gal Drum	0.1	0.0	0.1
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Cask - Misc w/ 1 - 30-gal Drum	3.4	0.0	7.4
Current Form Total	8.1	0.0	8.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.5	0.0	2.5
Final Form Total	2.5	0.0	2.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	19.45
Aluminum-based Metals/Alloys	7.42
Other Metals	14.91
Other Inorganic Materials	4.24
Cellulosics	12.64
Rubber	9.76
Plastics	7.26
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.32E-02
Np-237	9.34E-08
Pu-238	5.91E+02
Pu-239	1.44E-01
Pu-240	3.36E-02
Pu-241	9.93E-02
Pu-242	1.94E-06
Th-229	4.44E-15
Th-230	1.04E-05
Th-232	2.85E-17
U-233	5.18E-12
U-234	6.54E-02
U-235	4.82E-09
U-236	3.39E-08
U-238	9.98E-15

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Hepa Filters

Waste Stream ID: LA-TA-21-10

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Isotopic Source				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Crate	0.1	0.0	0.1
Current Form Total	0.1	0.0	0.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	64.42
Aluminum-based Metals/Alloys	0.26
Other Metals	7.72
Other Inorganic Materials	41.78
Cellulosics	5.33
Rubber	8.00
Plastics	24.67
Cements	0.00
Inorganic Matrix	1.03
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-239	2.69E-01
U-235	8.48E-09

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Isotopic Source

Waste Stream ID: LA-TA-21-11

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	NonCombustible Building Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Crate	3.2	0.0	19.1
Other	2.1	0.0	2.1
Current Form Total	21.2	0.0	21.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	13.2	0.0	13.2
Final Form Total	13.2	0.0	13.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	61.06
Aluminum-based Metals/Alloys	0.25
Other Metals	7.32
Other Inorganic Materials	39.60
Cellulosics	5.05
Rubber	7.58
Plastics	23.38
Cements	0.00
Inorganic Matrix	0.97
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	3.90E-02
Pu-239	1.60E+00
Th-230	7.34E-10
U-234	4.46E-06
U-235	5.52E-08

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

NonCombustible Building Debris

Waste Stream ID: LA-TA-21-12

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Non-combustible and combustible debris waste (mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
15-gal Drum	0.6	0.0	0.6
30-gal Drum	3.7	0.0	3.7
55-gal Drum Dir Ld w/ Liner	114.0	0.0	114.0
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	1.3	0.0	1.3
Box - Crate	6.3	0.0	6.3
Cask - Misc w/ 1 - 30-gal Drum	19.3	0.0	121.8
Current Form Total	247.7	0.0	247.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	159.5	0.0	159.5
SWB Dir Ld w/ Liner	3.8	0.0	3.8
Final Form Total	163.3	0.0	163.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.40
Aluminum-based Metals/Alloys	0.20
Other Metals	0.20
Other Inorganic Materials	0.20
Cellulosics	21.20
Rubber	8.50
Plastics	35.80
Cements	514.40
Inorganic Matrix	0.20
Organic Matrix	0.20
Soils/gravel	0.20
Vitrified	0.00
Packaging Material, Steel	131.33
Packaging Material, Plastic	36.17
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.11E-01
Np-237	2.95E-06
Pu-238	2.70E+02
Pu-239	1.69E+00
Pu-240	5.57E-01
Pu-241	2.99E+00
Pu-242	1.40E-04
Th-229	7.90E-04
Th-230	4.46E-06
Th-232	4.45E-16
U-233	2.56E-01
U-234	2.88E-02
U-235	1.26E-05
U-236	5.46E-07
U-238	6.96E-13

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Combined Combustible and NonCombustible Trash Non-combustible and combustible waste generated from facility and equipment operations and maintenance. This waste includes, but may not be limited to, small tools, small equipment, cans, motors, pumps, process equipment, gloveboxes, ventilation ductwork, HEPA filters, pipes, glass, graphite, slag and crucibles, salt, discarded lab ware, windows, and bottles. The waste stream may also contain a smaller fraction of combustible solids (e.g., paper, rags, plastic, rubber, leaded gloves) and a small fraction of homogeneous solids (e.g., leached solids, ash, hydroxide cakes, impure oxides).

Waste Stream ID: LA-TA-21-13

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Cemented wastewater treatment sludge (mixed)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	16.0	0.0	16.0
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.3	0.0	0.3
Other	41.0	0.0	2917.3
Current Form Total	2933.6	0.0	2933.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	16.2	0.0	16.2
SWB Dir Ld w/ Liner	1750.1	0.0	1750.1
Final Form Total	1766.4	0.0	1766.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	693.00
Inorganic Matrix	603.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.29
Packaging Material, Plastic	1.53
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.29E+00
Np-237	8.76E-05
Pu-238	1.02E-01
Pu-239	6.98E-02
Th-229	7.81E-12
Th-230	3.19E-09
Th-232	6.21E-08
U-233	6.91E-09
U-234	1.56E-05
U-235	1.36E-05
U-238	6.32E-06

Haz. Waste No(s).

D007, F001, F002

No TRUCON Codes Provided

Waste Stream Description

Cemented Wastewater Treatment Sludge Solidified aqueous waste generated from facility and equipment operations and maintenance. Solidified aqueous waste is a dewatered sludge generated by the vacuum filtration of solids from treated aqueous waste slurry. The filter media (diatomaceous earth) with the entrapped filtrate is then placed in drums with dry concreted absorbent.

Waste Stream ID: LA-TA-21-14

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Soils	Waste Matrix Code	S4100	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Plutonium contaminated soil (non-mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	7.9	0.0	7.9
Box - Crate	3.3	0.0	73.2
Box - FRP	3.2	0.0	3.2
Current Form Total	84.3	0.0	84.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	7.9	0.0	7.9
SWB Dir Ld w/ Liner	47.3	0.0	47.3
Final Form Total	55.2	0.0	55.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	55.61
Aluminum-based Metals/Alloys	0.00
Other Metals	6.18
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	955.21
Vitrified	0.00
Packaging Material, Steel	150.25
Packaging Material, Plastic	6.33
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-239	1.69E-01
U-235	4.83E-09

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Plutonium Contaminated Soils contaminated with transuranic material.

Waste Stream ID: LA-TA-21-15

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Organics	Waste Matrix Code	S3200	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Solidified organics (mixed)				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
30-gal Drum	0.2	0.0	0.2
55-gal Drum Dir Ld w/ Liner	3.3	0.0	3.3
Current Form Total	3.6	0.0	3.6

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	250.98
Aluminum-based Metals/Alloys	0.39
Other Metals	18.31
Other Inorganic Materials	7.75
Cellulosics	62.33
Rubber	1.07
Plastics	5.16
Cements	13.41
Inorganic Matrix	11.65
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.50E-02
Np-237	5.79E-07
Pu-238	2.12E-02
Pu-239	1.26E+00
Pu-240	2.18E-01
Pu-241	6.76E-01
Pu-242	1.26E-05
Th-229	2.58E-14
Th-230	3.51E-10
Th-232	1.74E-16
U-233	3.11E-11
U-234	2.27E-06
U-235	4.12E-08
U-236	2.14E-07
U-238	6.29E-14

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Solidified Organic liquids generated from facility and equipment operations and maintenance and absorbed on vermiculite.

Waste Stream ID: LA-TA-21-16

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Cemented inorganics (mixed)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
30-gal Drum	26.2	0.0	26.2
55-gal Drum Dir Ld w/ Liner	31.4	0.0	31.4
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.3	0.0	0.3
Current Form Total	57.9	0.0	57.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	79.9	0.0	79.9
Final Form Total	79.9	0.0	79.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	43.30
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	508.10
Inorganic Matrix	453.40
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.04E-01
Np-237	5.49E-06
Pu-238	2.59E-01
Pu-239	7.93E+00
Pu-240	1.89E+00
Pu-241	6.34E+00
Pu-242	1.55E-04
Th-229	2.47E-13
Th-230	4.28E-09
Th-232	1.51E-15
U-233	2.96E-10
U-234	2.77E-05
U-235	4.15E-05
U-236	1.85E-06
U-238	7.74E-13

Haz. Waste No(s).

D008

No TRUCON Codes Provided

Waste Stream Description

Cemented Inorganics Solidified inorganic process solids generated from facility and equipment operations and maintenance. This waste consists of process leached solids, ash, filter cakes, salts, metal oxides, fines, or evaporator bottoms stabilized in Portland or gypsum cement.

Waste Stream ID: LA-TA-21-17

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Special Items Requiring Tracking by CST-7			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
30-gal Drum	0.1	0.0	0.1
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
Current Form Total	0.5	0.0	0.5

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	58.49
Aluminum-based Metals/Alloys	0.24
Other Metals	7.01
Other Inorganic Materials	37.93
Cellulosics	4.84
Rubber	7.26
Plastics	22.40
Cements	0.00
Inorganic Matrix	0.93
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.87E-03
Np-237	2.73E-08
Pu-238	9.45E-04
Pu-239	4.20E-02
Pu-240	9.80E-03
Pu-241	2.90E-02
Pu-242	5.67E-07
Th-229	1.30E-15
Th-230	1.67E-11
Th-232	8.31E-18
U-233	1.51E-12
U-234	1.05E-07
U-235	1.41E-09
U-236	9.90E-09
U-238	2.91E-15

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Special Items Requiring Tracking by CST-7

Waste Stream ID: LA-TA-21-40

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Metal debris (mixed)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	1.6	0.0	1.6
Box - Crate	10.8	0.0	637.2
Box - FRP	5.4	0.0	441.1
SWB w/ 4 - 55-gal Drums w/ Liners	15.1	0.0	15.1
Current Form Total	1095.2	0.0	1095.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1.2	0.0	1.2
SWB Dir Ld w/ Liner	648.3	0.0	648.3
SWB w/ 4 - 55-gal Drums w/ Liners	15.1	0.0	15.1
Final Form Total	664.6	0.0	664.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	272.60
Aluminum-based Metals/Alloys	0.00
Other Metals	30.30
Other Inorganic Materials	6.80
Cellulosics	64.00
Rubber	1.10
Plastics	5.20
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	154.77
Packaging Material, Plastic	1.61
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.38E-04
Cs-137	8.19E-10
Np-237	2.66E-08
Pu-238	2.03E+00
Pu-239	5.03E-01
Pu-240	1.33E-03
Pu-241	2.21E-03
Pu-242	7.74E-08
Pu-244	2.63E-07
Sr-90	5.18E-09
Th-229	2.04E-11
Th-230	2.35E-08
Th-232	7.68E-19
U-233	7.80E-09
U-234	1.80E-04
U-235	1.39E-08
U-236	1.11E-09
U-238	2.05E-09

Haz. Waste No(s).

D004, D006, D007,
D008, D009

TRUCON Code(s)

117/217

Waste Stream Description

Mixed metal scrap, discarded gloveboxes, and incidental combustible waste generated from facility and equipment decontamination and decommissioning at TA21. This waste consists mostly of metals or metal equipment, either whole or sectioned, gloveboxes, glovebox equipment, glass, and small volumes of combustibles generated during decommissioning. This waste may also include items such as small tools, cans, motors, and pumps. Gloveboxes may include gloves, wiring, plastic, glass windows, plastic wrapping, and lead shielding.

Waste Stream ID: LA-TA-21-41

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Soils	Waste Matrix Code	S4100	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Plutonium-contaminated soil (non-mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Crate	3.2	0.0	22.5
Current Form Total	22.5	0.0	22.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	15.1	0.0	15.1
Final Form Total	15.1	0.0	15.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	272.60
Aluminum-based Metals/Alloys	0.00
Other Metals	30.30
Other Inorganic Materials	6.80
Cellulosics	64.00
Rubber	1.10
Plastics	5.30
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-239	1.21E+00
U-235	3.34E-08

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Soils contaminated with transuranic material resulting from TA21 decontamination and decommissioning.

Waste Stream ID: LA-TA-21-42

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Metal debris (nonmixed)				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Crate	3.2	0.0	91.4
Box - FRP	1.6	0.0	9.7
Current Form Total	101.2	0.0	101.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	62.4	0.0	62.4
Final Form Total	62.4	0.0	62.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	264.04
Aluminum-based Metals/Alloys	0.23
Other Metals	23.76
Other Inorganic Materials	6.80
Cellulosics	63.98
Rubber	1.10
Plastics	5.26
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.18E-01
Np-237	3.15E-06
Pu-238	7.20E-02
Pu-239	3.38E-01
Pu-241	2.33E-01
Th-229	3.92E-13
Th-230	8.35E-10
U-233	3.20E-10
U-234	6.40E-06
U-235	6.83E-07

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Metal scrap, discarded gloveboxes, and incidental combustible waste generated from facility and equipment decontamination and decommissioning at TA21. This waste consists mostly of metals or metal equipment, either whole or sectioned gloveboxes, glovebox equipment, glass, and small volumes of combustibles generated during decommissioning. This waste may also include items such as small tools, cans, motors, and pumps. Gloveboxes may include gloves, wiring, plastic, glass windows, and plastic wrapping.

Waste Stream ID: **LA-TA-48-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combustible and noncombustible debris (non-mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	8.3	0.0	8.3
Current Form Total	8.3	0.0	8.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	8.3	0.0	8.3
Final Form Total	8.3	0.0	8.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	53.62
Aluminum-based Metals/Alloys	0.17
Other Metals	4.95
Other Inorganic Materials	30.06
Cellulosics	3.41
Rubber	5.12
Plastics	30.49
Cements	0.00
Inorganic Matrix	0.66
Organic Matrix	71.71
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.55E-02
Am-243	2.51E-06
Cs-137	5.77E-05
Np-237	1.44E-05
Pu-238	5.88E-02
Pu-239	7.33E-02
Pu-240	1.84E-02
Pu-241	2.05E-01
Pu-242	5.14E-07
Th-229	4.58E-07
Th-230	1.24E-10
Th-232	3.37E-19
U-233	9.77E-04
U-234	3.18E-06
U-235	3.65E-10
U-236	2.73E-09
U-238	4.28E-16

Haz. Waste No(s).

D008, D011

TRUCON Code(s)

116/216, 125/225

Waste Stream Description

Combustible and noncombustible debris

Waste Stream ID: LA-TA-50-01

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combustible	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Current Form Total	1.9	0.0	1.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	20.07
Aluminum-based Metals/Alloys	0.08
Other Metals	2.41
Other Inorganic Materials	13.02
Cellulosics	1.66
Rubber	2.49
Plastics	7.69
Cements	0.00
Inorganic Matrix	0.32
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	211.10
Packaging Material, Plastic	16.30
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.50E-03
Am-243	3.79E-06
Cs-137	6.27E-04
Np-237	1.73E-08
Pu-238	1.16E-04
Pu-239	4.59E-04
Th-229	4.05E-17
Th-230	4.40E-09
U-233	2.22E-13
U-234	9.79E-05
U-235	1.80E-06

No Hazardous Waste Numbers Provided

TRUCON Code(s)
116/216

Waste Stream Description

Combustible

Waste Stream ID: LA-TA-50-02

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combustible	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	71.53
Aluminum-based Metals/Alloys	0.29
Other Metals	8.57
Other Inorganic Materials	46.39
Cellulosics	5.92
Rubber	8.88
Plastics	27.39
Cements	0.00
Inorganic Matrix	1.14
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.09E-02
Cs-137	4.60E-07
Np-237	4.62E-07
Pu-238	5.54E-01
Pu-239	5.58E-02
Pu-241	2.87E-01
Th-229	2.96E-15
Th-230	2.63E-10
U-233	1.09E-11
U-234	9.67E-06
U-235	5.18E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s)
116/216, 117/217

Waste Stream Description

Combustible

Waste Stream ID: LA-TA-50-05

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combined Combustible and NonCombustible			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	49.49
Aluminum-based Metals/Alloys	0.20
Other Metals	5.93
Other Inorganic Materials	32.10
Cellulosics	4.10
Rubber	6.14
Plastics	18.95
Cements	0.00
Inorganic Matrix	0.79
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.24E-02
Np-237	1.33E-07
Pu-238	1.53E-01
Pu-239	7.21E-01
Pu-240	1.92E-02
Pu-241	1.51E-01
Th-229	2.21E-16
Th-230	4.99E-11
Th-232	3.52E-19
U-233	1.42E-12
U-234	2.21E-06
U-235	1.80E-08
U-236	2.85E-09

Haz. Waste No(s).

D004, D006, D007,
D008, D009, D010

TRUCON Code(s)

125/225

Waste Stream Description

Combined Combustible and NonCombustible

Waste Stream ID: **LA-TA-50-06**

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combined Combustible and NonCombustible			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1.7	0.0	1.7
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Current Form Total	3.6	0.0	3.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1.7	0.0	1.7
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	3.6	0.0	3.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	40.18
Aluminum-based Metals/Alloys	0.16
Other Metals	4.82
Other Inorganic Materials	26.06
Cellulosics	3.33
Rubber	4.99
Plastics	15.39
Cements	0.00
Inorganic Matrix	0.64
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	173.50
Packaging Material, Plastic	25.99
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.00E+00
Np-237	1.53E-05
Pu-238	8.70E-01
Pu-239	1.03E+00
Pu-240	6.12E-01
Pu-241	1.45E+01
Pu-242	8.49E-04
Th-229	2.84E-13
Th-230	3.51E-09
Th-232	1.30E-16
U-233	5.44E-10
U-234	4.49E-05
U-235	1.73E-08
U-236	3.09E-07
U-238	2.18E-12

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Combined Combustible and NonCombustible

Waste Stream ID: LA-TA-50-10

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Vacuum filter cake (non-mixed)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	3.3	0.0	3.3
55-gal POC - 12" w/ Liner	0.6	0.0	0.6
Current Form Total	4.0	0.0	4.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	3.3	0.0	3.3
55-gal POC - 12" w/ Liner	0.6	0.0	0.6
Final Form Total	4.0	0.0	4.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.07
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.06
Cellulosics	0.00
Rubber	0.00
Plastics	4.48
Cements	0.00
Inorganic Matrix	1418.21
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	193.42
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	21.71
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.55E+00
Np-237	9.88E-06
Pu-238	4.59E+01
Pu-239	2.55E+01
Pu-240	6.10E+00
Pu-241	5.61E+01
Pu-242	3.78E-04
Th-229	6.04E-14
Th-230	6.17E-08
Th-232	4.47E-16
U-233	2.00E-10
U-234	1.35E-03
U-235	9.29E-05
U-236	1.81E-06
U-238	3.43E-03

Haz. Waste No(s).

D005, D006, D007, D008, D009, D010, D011

TRUCON Code(s)

124/224

Waste Stream Description

Vacuum filter Cake This waste is a dewatered sludge generated by the vacuum filtration of solids from treated aqueous waste slurry. The filter medium (diatomaceous earth) with the entrapped filtrate is then placed in drums with dry concrete absorbent.

Waste Stream ID: LA-TA-50-11

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combustible debris waste from area WM 66 (mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.3	0.0	0.3
Current Form Total	0.9	0.0	0.9

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	10.04
Aluminum-based Metals/Alloys	0.00
Other Metals	3.34
Other Inorganic Materials	16.18
Cellulosics	12.99
Rubber	1.32
Plastics	38.22
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.04E-01
Np-237	1.84E-06
Pu-238	7.64E-02
Pu-239	3.03E+00
Pu-240	6.87E-01
Pu-241	2.84E+00
Pu-242	3.97E-05
Th-229	6.41E-14
Th-230	8.20E-10
Th-232	3.67E-16
U-233	8.75E-11
U-234	6.52E-06
U-235	8.07E-08
U-236	5.51E-07
U-238	1.62E-13

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Combustible Debris waste generated from facility and equipment operations and maintenance. This waste includes paper, rags, plastic, rubber, wood-based HEPA filters, and plastic-based and cellulose-based waste generated at the facility. Plastic-based waste includes, but may not be limited to, tape, polyethylene and vinyl; gloves; plastic vials; polystyrene; Tygon tubing; polyvinyl chloride plastic; Teflon products; Plexiglas; and dry box gloves (unleaded neoprene base). Cellulose-based waste includes, but may not be limited to, rags, wood, paper, cardboard, laboratory coats and coveralls, booties and cotton gloves, and similar materials. The waste stream may also contain a smaller fraction of non-combustible solids (e.g., scrap metal, crucibles, metal lids, zippers, discarded tools) and a small fraction of homogenous solids, salts, leached solids, ash, hydroxide cakes, crucibles, impure oxides.

Waste Stream ID: LA-TA-50-12

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Metal	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1.2	0.0	1.2
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.6	0.0	0.6
Box - Crate	2.7	0.0	8.1
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Current Form Total	11.9	0.0	11.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1.7	0.0	1.7
SWB Dir Ld w/ Liner	5.7	0.0	5.7
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	9.2	0.0	9.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	37.42
Aluminum-based Metals/Alloys	0.12
Other Metals	3.45
Other Inorganic Materials	20.98
Cellulosics	2.38
Rubber	3.57
Plastics	21.28
Cements	0.00
Inorganic Matrix	0.46
Organic Matrix	50.04
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	161.21
Packaging Material, Plastic	10.75
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.35E-03
Np-237	2.00E-08
Pu-238	2.52E-03
Pu-239	9.10E-03
Pu-241	2.47E-04
Th-229	2.03E-15
Th-230	1.27E-09
U-233	1.73E-12
U-234	9.44E-06
U-235	2.69E-10
U-238	1.08E-01

Haz. Waste No(s).

D008

TRUCON Code(s)

117/217

Waste Stream Description

Metal

Waste Stream ID: LA-TA-50-13

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Glass				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.3	0.0	0.3
Current Form Total	0.3	0.0	0.3

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	18.07
Aluminum-based Metals/Alloys	0.07
Other Metals	2.17
Other Inorganic Materials	11.72
Cellulosics	1.50
Rubber	2.24
Plastics	6.92
Cements	0.00
Inorganic Matrix	0.29
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	4.31E-02
Th-230	2.45E-10
U-234	2.65E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Glass

Waste Stream ID: LA-TA-50-14

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Hepa filters	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	311.72
Aluminum-based Metals/Alloys	1.26
Other Metals	37.36
Other Inorganic Materials	202.15
Cellulosics	25.80
Rubber	38.70
Plastics	119.35
Cements	0.00
Inorganic Matrix	4.97
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.32E-01
Np-237	1.18E-06
Pu-238	7.40E-03
Pu-239	3.77E-02
Th-229	5.88E-14
Th-230	7.94E-11
U-233	6.94E-11
U-234	6.32E-07
U-235	1.01E-09

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Hepa filters

Waste Stream ID: LA-TA-50-15

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Non-combustible and combustible debris waste from operations at WCRRF & SRF			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	2.9	0.0	2.9
Other	3.2	0.0	125.3
SWB w/ 4 - 55-gal Drums w/ Liners	13.2	0.0	13.2
Current Form Total	141.8	0.0	141.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.3	0.0	2.3
SWB Dir Ld w/ Liner	75.6	0.0	75.6
SWB w/ 4 - 55-gal Drums w/ Liners	13.2	0.0	13.2
Final Form Total	91.1	0.0	91.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	260.30
Aluminum-based Metals/Alloys	0.14
Other Metals	104.83
Other Inorganic Materials	7.15
Cellulosics	44.84
Rubber	0.77
Plastics	3.69
Cements	4.92
Inorganic Matrix	4.27
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	161.29
Packaging Material, Plastic	4.29
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.56E-01
Cs-137	1.03E-02
Np-237	1.18E-06
Pu-238	2.74E+00
Pu-239	4.08E-01
Pu-240	9.06E-02
Pu-241	4.25E-01
Pu-242	5.89E-06
Sr-90	8.41E-03
Th-229	4.76E-14
Th-230	2.62E-08
Th-232	7.08E-17
U-233	6.21E-11
U-234	2.21E-04
U-235	1.80E-05
U-236	9.09E-08
U-238	1.62E-09

Haz. Waste No(s).

D008

No TRUCON Codes Provided

Waste Stream Description

Non-combustible and combustible debris waste from operations in the WCRRF and SRF (building 50-69) (mixed). Combined Non-combustible and combustible waste generated from facility and equipment operations and maintenance. This waste includes, but may not be limited to, small tools, small equipment, cans, motors, pumps, process equipment, gloveboxes, ventilation ductwork, HEPA filters, pipes, glass, graphite, slag and crucibles, salt, discarded lab ware, windows, and bottles. The waste stream may also contain a smaller fraction of combustible solids (e.g., paper, rags, plastic, rubber, leaded gloves) and a small fraction of homogeneous solids (e.g., leached solids, ash, hydroxide cakes, impure oxides).

Waste Stream ID: LA-TA-50-16

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combined Combustible and NonCombustible			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
SWB w/ 4 - 55-gal Drums w/ Liners	13.2	0.0	13.2
Current Form Total	13.2	0.0	13.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB w/ 4 - 55-gal Drums w/ Liners	13.2	0.0	13.2
Final Form Total	13.2	0.0	13.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	89.69
Aluminum-based Metals/Alloys	0.36
Other Metals	10.75
Other Inorganic Materials	58.17
Cellulosics	7.42
Rubber	11.13
Plastics	34.34
Cements	0.00
Inorganic Matrix	1.43
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	211.10
Packaging Material, Plastic	16.30
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.07E-02
Am-243	6.19E-04
Cs-137	4.58E-04
Np-237	2.70E-04
Pu-238	2.53E-01
Pu-239	4.79E-02
Pu-240	6.99E-03
Pu-241	2.15E-01
Pu-242	6.57E-07
Th-229	1.23E-11
Th-230	7.87E-10
Th-232	1.15E-18
U-233	1.75E-08
U-234	1.14E-05
U-235	7.08E-10
U-236	3.11E-09
U-238	1.49E-15

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

Combined Combustible and NonCombustible

Waste Stream ID: **LA-TA-50-18**

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3150	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Cemented caustic liquid waste (mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	3.5	0.0	3.5
Current Form Total	3.5	0.0	3.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	3.5	0.0	3.5
Final Form Total	3.5	0.0	3.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.08
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.07
Cellulosics	0.00
Rubber	0.00
Plastics	4.94
Cements	0.00
Inorganic Matrix	1562.62
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.60E-01
Np-237	5.37E-06
Pu-238	2.71E-01
Pu-239	1.78E-01
Pu-240	2.64E-02
Th-229	4.52E-13
Th-230	5.09E-09
Th-232	2.37E-17
U-233	4.12E-10
U-234	3.09E-05
U-235	3.58E-06
U-236	2.74E-08

Haz. Waste No(s).

D007, D009, F001, F002

TRUCON Code(s)

111/211

Waste Stream Description

Cemented Caustic Liquid Waste Solidified (through cementation) caustic aqueous waste from TA-55. The sludge is a residue from numerous treatment and filtration operations involving aqueous liquid radioactive waste.

Waste Stream ID: LA-TA-50-19

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3120	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Vacuum filter cake (mixed)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
110-gal Drum w/ 1 - 55-gal Drum w/ Liner	1.2	0.0	1.2
55-gal Drum Dir Ld w/ Liner	65.7	0.0	65.7
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	1.6	0.0	1.6
Other	5.4	0.0	67.6
Current Form Total	136.2	0.0	136.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	67.4	0.0	67.4
SWB Dir Ld w/ Liner	41.6	0.0	41.6
Final Form Total	109.0	0.0	109.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.08
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.07
Cellulosics	0.00
Rubber	0.00
Plastics	4.77
Cements	0.00
Inorganic Matrix	1508.15
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	139.46
Packaging Material, Plastic	23.34
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.22E-01
Cs-137	9.77E-09
Np-237	2.67E-06
Pu-238	4.31E-01
Pu-239	6.97E-02
Pu-241	8.41E-05
Sr-90	9.53E-09
Th-229	2.38E-13
Th-230	8.64E-09
U-233	2.11E-10
U-234	5.10E-05
U-235	5.19E-07

Haz. Waste No(s).

F001

No TRUCON Codes Provided

Waste Stream Description

Vacuum filter Cake This waste is a dewatered sludge generated by the vacuum filtration of solids from treated aqueous waste slurry. The filter medium (diatomaceous earth) with the entrapped filtrate is then placed in drums with dry concrete absorbent

Waste Stream ID: LA-TA-50-20

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Soils	Waste Matrix Code	S4100	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Plutonium contaminated soil (non-mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.3	0.0	0.3
Current Form Total	0.7	0.0	0.7

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	1200.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.59E-03
Np-237	4.41E-08
Pu-239	4.80E-03
Th-229	2.55E-15
U-233	2.80E-12
U-235	1.37E-10

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Plutonium Contaminated Soils contaminated with transuranic material as a result of facility and equipment operations and maintenance.

Waste Stream ID: LA-TA-50-40

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Metal debris waste from TA-50 decontamination and decommissioning activities (mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Crate	0.6	0.0	0.6
Current Form Total	0.6	0.0	0.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	263.87
Aluminum-based Metals/Alloys	0.23
Other Metals	23.62
Other Inorganic Materials	6.80
Cellulosics	63.98
Rubber	1.10
Plastics	5.26
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-239	3.20E-04
U-235	8.53E-12

Haz. Waste No(s).

D008

No TRUCON Codes Provided

Waste Stream Description

The waste mostly consists of metals or metal equipment, such as motors, pumps, tools, and process equipment, either whole or sectioned, and lesser amounts of combustible components. The waste also includes mixed metal scrap and incidental combustible waste generated from size reduction of equipment from various TAs throughout LANL. In addition, it contains small volumes of combustibles generated during decommissioning, sectioning, and packaging.

Waste Stream ID: **LA-TA-50-41**

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Metal debris waste from TA-50 decontamination and decommissioning activities (non-mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - FRP	3.2	0.0	34.3
Current Form Total	34.3	0.0	34.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	20.8	0.0	20.8
Final Form Total	20.8	0.0	20.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	272.60
Aluminum-based Metals/Alloys	0.00
Other Metals	30.30
Other Inorganic Materials	6.80
Cellulosics	64.00
Rubber	1.10
Plastics	5.30
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.80E-03
Np-237	1.41E-08
Pu-238	1.99E-03
Pu-239	7.67E-02
Pu-240	1.79E-02
Pu-241	1.26E-01
Pu-242	1.04E-06
Th-229	1.35E-16
Th-230	7.07E-12
Th-232	3.37E-18
U-233	3.47E-13
U-234	9.63E-08
U-235	1.21E-09
U-236	8.52E-09
U-238	2.50E-15

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste mostly consists of metals or metal equipment, such as motors, pumps, tools, and process equipment, either whole or sectioned, and lesser amounts of combustible components. The waste also includes metal scrap and incidental combustible waste generated from size reduction of equipment from various TAs throughout LANL. In addition, it contains small volumes of combustibles generated during decommissioning, sectioning, and packaging.

Waste Stream ID: LA-TA-55-03

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combustible				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	33.7	0.0	33.7
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Current Form Total	35.6	0.0	35.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	33.7	0.0	33.7
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	35.6	0.0	35.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	53.75
Aluminum-based Metals/Alloys	0.17
Other Metals	4.96
Other Inorganic Materials	30.13
Cellulosics	3.42
Rubber	5.13
Plastics	30.57
Cements	0.00
Inorganic Matrix	0.66
Organic Matrix	71.88
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	135.06
Packaging Material, Plastic	35.90
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.06E+00
Np-237	2.45E-05
Pu-238	3.48E+00
Pu-239	6.14E+00
Pu-240	1.53E+00
Pu-241	1.55E+01
Pu-242	4.49E-03
Pu-244	7.68E-10
Th-229	5.45E-13
Th-230	5.70E-09
Th-232	1.36E-16
U-233	1.08E-09
U-234	1.14E-04
U-235	3.41E-07
U-236	4.99E-07
U-238	2.93E-09

Haz. Waste No(s).

D006, D007, D008, D009

TRUCON Code(s)

116/216, 124/224

Waste Stream Description

Combustible

Waste Stream ID: LA-TA-55-04

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Metal	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	116.09
Aluminum-based Metals/Alloys	0.47
Other Metals	13.91
Other Inorganic Materials	75.29
Cellulosics	9.61
Rubber	14.41
Plastics	44.45
Cements	0.00
Inorganic Matrix	1.85
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.60E-01
Np-237	1.00E-06
Pu-238	7.21E-02
Pu-239	2.67E+00
Pu-240	6.33E-01
Pu-241	5.67E+00
Pu-242	3.58E-05
Th-229	6.13E-15
Th-230	9.70E-11
Th-232	4.64E-17
U-233	2.03E-11
U-234	2.13E-06
U-235	2.63E-08
U-236	1.88E-07
U-238	5.40E-14

Haz. Waste No(s).

D008

TRUCON Code(s)

116/216, 117/217

Waste Stream Description

Metal

Waste Stream ID: LA-TA-55-05

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Metal	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	20.6	0.0	20.6
Other	3.0	0.0	57.5
Current Form Total	78.1	0.0	78.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	20.6	0.0	20.6
SWB Dir Ld w/ Liner	35.9	0.0	35.9
Final Form Total	56.5	0.0	56.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	140.06
Aluminum-based Metals/Alloys	0.44
Other Metals	12.92
Other Inorganic Materials	78.53
Cellulosics	8.92
Rubber	13.38
Plastics	79.65
Cements	0.00
Inorganic Matrix	1.72
Organic Matrix	187.32
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	145.23
Packaging Material, Plastic	14.25
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.85E-01
Am-243	1.54E-06
Cs-137	5.05E-09
Np-237	1.93E-06
Pu-238	2.34E+01
Pu-239	1.84E+00
Pu-240	4.51E-01
Pu-241	4.13E+00
Pu-242	1.18E-03
Pu-244	1.06E-09
Sr-90	5.00E-09
Th-229	3.73E-14
Th-230	4.11E-07
Th-232	4.76E-17
U-233	7.43E-11
U-234	4.22E-03
U-235	2.73E-06
U-236	1.61E-07
U-238	4.07E-08

Haz. Waste No(s).

D008

TRUCON Code(s)

117/217, 125/225

Waste Stream Description

Metal

Waste Stream ID: LA-TA-55-07

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Glass	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	60.94
Aluminum-based Metals/Alloys	0.25
Other Metals	7.30
Other Inorganic Materials	39.52
Cellulosics	5.04
Rubber	7.56
Plastics	23.33
Cements	0.00
Inorganic Matrix	0.97
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.43E+00
Np-237	4.34E-06
Pu-238	1.39E+01
Pu-239	7.62E+00
Pu-240	1.86E+00
Pu-241	2.09E+01
Pu-242	3.74E-02
Pu-244	5.22E-08
Th-229	3.20E-14
Th-230	2.28E-08
Th-232	1.65E-16
U-233	9.64E-11
U-234	4.54E-04
U-235	8.27E-08
U-236	6.09E-07
U-238	6.21E-11

No Hazardous Waste Numbers Provided

TRUCON Code(s)
118/218

Waste Stream Description

Glass

Waste Stream ID: LA-TA-55-08

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Hepa Filters	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.7	0.0	2.7
Current Form Total	2.7	0.0	2.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.7	0.0	2.7
Final Form Total	2.7	0.0	2.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	40.65
Aluminum-based Metals/Alloys	0.16
Other Metals	4.87
Other Inorganic Materials	26.36
Cellulosics	3.36
Rubber	5.05
Plastics	15.57
Cements	0.00
Inorganic Matrix	0.65
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.54E-01
Np-237	1.07E-06
Pu-238	2.63E+00
Pu-239	2.55E+00
Pu-240	6.04E-01
Pu-241	5.19E+00
Pu-242	3.48E-05
Th-229	7.92E-15
Th-230	4.30E-09
Th-232	5.36E-17
U-233	2.39E-11
U-234	8.58E-05
U-235	2.76E-08
U-236	1.97E-07
U-238	5.78E-14

No Hazardous Waste Numbers Provided

TRUCON Code(s)
119/219

Waste Stream Description

Hepa Filters

Waste Stream ID: LA-TA-55-09

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Leaded Gloves	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	199.95
Aluminum-based Metals/Alloys	0.62
Other Metals	18.44
Other Inorganic Materials	112.11
Cellulosics	12.73
Rubber	19.10
Plastics	113.72
Cements	0.00
Inorganic Matrix	2.45
Organic Matrix	267.42
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.47E-02
Am-243	1.03E-05
Np-237	3.87E-06
Pu-238	2.27E+02
Pu-239	2.12E-01
Pu-240	1.14E-01
Pu-241	1.31E+00
Pu-242	1.40E-03
Pu-244	1.42E-09
Th-229	9.17E-14
Th-230	4.20E-06
Th-232	1.01E-17
U-233	1.79E-10
U-234	4.61E-02
U-235	2.30E-09
U-236	3.73E-08
U-238	2.32E-12

Haz. Waste No(s).

D008

TRUCON Code(s)

123/223

Waste Stream Description

Leaded Gloves

Waste Stream ID: LA-TA-55-10

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Leaded Gloves	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	213.19
Aluminum-based Metals/Alloys	0.66
Other Metals	19.66
Other Inorganic Materials	119.53
Cellulosics	13.58
Rubber	20.36
Plastics	121.24
Cements	0.00
Inorganic Matrix	2.61
Organic Matrix	285.13
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.37E-01
Am-243	1.77E-05
Np-237	5.96E-06
Pu-238	1.27E+02
Pu-239	1.20E-01
Pu-240	1.04E-01
Pu-241	3.92E+00
Pu-242	1.10E-02
Th-229	1.11E-13
Th-230	2.10E-06
Th-232	7.61E-18
U-233	2.42E-10
U-234	2.52E-02
U-235	1.18E-09
U-236	3.08E-08
U-238	1.65E-11

Haz. Waste No(s).

D008

TRUCON Code(s)

116/216, 123/223

Waste Stream Description

Leaded Gloves

Waste Stream ID: LA-TA-55-12

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combustible and NonCombustible	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	48.59
Aluminum-based Metals/Alloys	0.20
Other Metals	5.82
Other Inorganic Materials	31.51
Cellulosics	4.02
Rubber	6.03
Plastics	18.60
Cements	0.00
Inorganic Matrix	0.77
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.74E-02
Np-237	1.95E-07
Pu-238	1.83E-02
Pu-239	1.36E-01
Pu-240	6.64E-02
Pu-241	1.30E+00
Pu-242	1.96E-05
Th-229	9.75E-16
Th-230	1.99E-11
Th-232	3.94E-18
U-233	3.58E-12
U-234	4.85E-07
U-235	1.10E-03
U-236	1.77E-08
U-238	4.21E-06

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

Combustible and NonCombustible

Waste Stream ID: LA-TA-55-14

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3120	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Cemented Inorganics				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	10.0	60.9	70.9
Current Form Total	10.0	60.9	70.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	10.0	60.9	70.9
Final Form Total	10.0	60.9	70.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	719.88
Aluminum-based Metals/Alloys	2.24
Other Metals	66.39
Other Inorganic Materials	403.61
Cellulosics	45.84
Rubber	68.76
Plastics	409.40
Cements	0.00
Inorganic Matrix	8.83
Organic Matrix	962.78
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.40E+00
Np-237	3.68E-05
Pu-238	5.29E-02
Pu-239	1.79E+00
Pu-240	4.26E-01
Pu-241	3.52E+00
Pu-242	1.73E-04
Th-229	3.58E-13
Th-230	1.04E-10
Th-232	4.50E-17
U-233	9.55E-10
U-234	1.89E-06
U-235	1.32E-06
U-236	1.52E-07
U-238	8.19E-08

No Hazardous Waste Numbers Provided

TRUCON Code(s)

114/214

Waste Stream Description

Cemented Inorganics

Waste Stream ID: LA-TA-55-15

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Salt Waste	Waste Matrix Code	S3140	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Pyrochemical salts	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	17.5	0.0	17.5
55-gal POC - 12" w/ Liner	0.4	0.0	0.4
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.3	0.0	0.3
Current Form Total	18.2	0.0	18.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	17.7	0.0	17.7
55-gal POC - 12" w/ Liner	0.4	0.0	0.4
Final Form Total	18.1	0.0	18.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	80.55
Aluminum-based Metals/Alloys	0.25
Other Metals	7.43
Other Inorganic Materials	45.16
Cellulosics	5.13
Rubber	7.69
Plastics	45.81
Cements	0.00
Inorganic Matrix	0.99
Organic Matrix	107.73
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	139.92
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	3.16
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.44E+00
Np-237	1.35E-05
Pu-238	5.50E+01
Pu-239	2.95E+01
Pu-240	7.21E+00
Pu-241	6.52E+01
Pu-242	5.20E-04
Th-229	9.94E-14
Th-230	9.00E-08
Th-232	6.39E-16
U-233	3.00E-10
U-234	1.79E-03
U-235	3.20E-07
U-236	2.35E-06
U-238	8.63E-13

Haz. Waste No(s).

D007, D008, D009

TRUCON Code(s)

124/224

Waste Stream Description

Pyrochemical salts

Waste Stream ID: LA-TA-55-17B

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3120	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	ORGANIC LIQUIDS ABSORBED ON VERMICULITE			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.9	2.1	5.0
Current Form Total	2.9	2.1	5.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.9	2.1	5.0
Final Form Total	2.9	2.1	5.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.01
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.30
Cements	0.00
Inorganic Matrix	55.57
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.72E-02
Np-237	3.88E-08
Pu-238	3.41E-02
Pu-239	1.34E-01
Pu-240	3.17E-02
Pu-241	3.13E-01
Pu-242	1.80E-06
Th-229	1.54E-16
Th-230	2.90E-11
Th-232	1.49E-18
U-233	6.33E-13
U-234	7.99E-07
U-235	1.05E-09
U-236	7.52E-09
U-238	2.17E-15

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D027, D028, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D043, F001, F002, F003, F005

TRUCON Code(s)

112/212

Waste Stream Description

ORGANIC LIQUIDS ABSORBED ON VERMICULITE

Waste Stream ID: LA-TA-55-18

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Graphite				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.6	0.0	0.6
Current Form Total	0.6	0.0	0.6

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	88.85
Aluminum-based Metals/Alloys	0.28
Other Metals	8.19
Other Inorganic Materials	49.81
Cellulosics	5.66
Rubber	8.49
Plastics	50.53
Cements	0.00
Inorganic Matrix	1.09
Organic Matrix	118.83
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	2.86E+02
Th-230	2.18E-06
U-234	2.04E-02

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Graphite

Waste Stream ID: LA-TA-55-19

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combustible debris waste (mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	295.8	143.1	438.9
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	7.7	0.0	7.7
Cask - Misc w/ 1 - 30-gal Drum	28.4	0.0	28.4
SWB w/ 4 - 55-gal Drums w/ Liners	66.2	0.0	66.2
Current Form Total	398.1	143.1	541.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	315.5	143.1	458.6
SWB w/ 4 - 55-gal Drums w/ Liners	66.2	0.0	66.2
Final Form Total	381.7	143.1	524.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	40.71
Aluminum-based Metals/Alloys	0.10
Other Metals	5.78
Other Inorganic Materials	31.68
Cellulosics	12.96
Rubber	4.19
Plastics	18.36
Cements	0.00
Inorganic Matrix	0.79
Organic Matrix	43.17
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	140.92
Packaging Material, Plastic	34.39
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.60E-01
Am-243	3.02E-06
Cs-137	7.50E-09
Np-237	8.33E-06
Pu-238	1.51E+01
Pu-239	3.44E+00
Pu-240	1.02E+00
Pu-241	6.14E+00
Pu-242	1.79E-03
Pu-244	1.48E-09
Sr-90	7.17E-10
Th-229	1.56E-07
Th-230	4.26E-07
Th-232	4.68E-11
U-233	5.96E-05
U-234	2.34E-03
U-235	1.31E-05
U-236	2.60E-06
U-238	7.00E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

TRUCON Code(s)

116/216, 117/217, 118/218, 125/225, 130/230

Waste Stream Description

Combustible waste generated from facility and equipment operations and maintenance. This waste includes paper, rags, plastic, rubber, wood-based HEPA filters, and plastic-based and cellulose-based waste generated at the facility. Plastic-based waste includes, but may not be limited to, tape, polyethylene and vinyl; gloves; plastic vials; polystyrene; Tygon tubing; polyvinyl chloride plastic; Teflon products; Plexiglas; and dry box gloves (unleaded neoprene base). Cellulose-based waste includes, but may not be limited to, rags, wood, paper, cardboard, laboratory coats and coveralls, booties and cotton gloves, and similar materials. The waste stream may also contain a smaller fraction of non-combustible solids (e.g., scrap metal, crucibles, metal lids, zippers, discarded tools) and a small fraction of homogenous solids, salts, leached solids, ash, hydroxide cakes, crucibles, impure oxides.

Waste Stream ID: LA-TA-55-19.01-S

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-LA-TA-55-19.01	0.2
55-gal Drum Dir Ld w/o Liner	WP-LA-TA-55-19.01	5.6
SWB Dir Ld w/o Liner	WP-LA-TA-55-19.01	75.6
Shipped Total		81.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	51.12
Aluminum-based Metals/Alloys	0.03
Other Metals	0.10
Other Inorganic Materials	0.27
Cellulosics	6.20
Rubber	2.18
Plastics	26.49
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.12E-01
Am-243	5.37E-05
Cs-137	1.10E-08
Np-237	4.90E-05
Pu-238	2.48E-01
Pu-239	3.06E+00
Pu-240	7.56E-01
Pu-241	7.13E+00
Pu-242	2.05E-03
Th-229	4.71E-13
Th-230	4.32E-07
Th-232	2.71E-17
U-233	1.44E-09
U-234	1.45E-03
U-235	2.80E-06
U-236	1.57E-07
U-238	4.75E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: LA-TA-55-19.02-S

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5300	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-LA-TA-55-19.02	16.0
55-gal Drum Dir Ld w/o Liner	WP-LA-TA-55-19.02	171.4
SWB Dir Ld w/o Liner	WP-LA-TA-55-19.02	13.2
SWB w/ 4 - 55-gal Drums w/ Liners	WP-LA-TA-55-19.02	1.9
SWB w/ 4 - 55-gal Drums w/o Liners	WP-LA-TA-55-19.02	26.5
Shipped Total		229.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	10.64
Aluminum-based Metals/Alloys	0.02
Other Metals	0.66
Other Inorganic Materials	3.05
Cellulosics	39.08
Rubber	4.67
Plastics	62.20
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.03
Soils/gravel	0.18
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.65E+00
Am-243	3.38E-04
Cs-137	2.36E-06
Np-237	9.50E-05
Pu-238	8.85E-01
Pu-239	3.57E+00
Pu-240	9.97E-01
Pu-241	1.32E+01
Pu-242	5.43E-03
Sr-90	2.19E-06
Th-229	9.30E-09
Th-230	7.49E-06
Th-232	8.99E-08
U-233	1.98E-05
U-234	3.52E-03
U-235	4.17E-06
U-236	1.48E-07
U-238	6.67E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: LA-TA-55-20

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combustible debris waste (non-mixed)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	34.9	0.0	34.9
SWB w/ 4 - 55-gal Drums w/ Liners	11.3	0.0	11.3
Current Form Total	46.3	0.0	46.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	34.9	0.0	34.9
SWB w/ 4 - 55-gal Drums w/ Liners	11.3	0.0	11.3
Final Form Total	46.3	0.0	46.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	60.99
Aluminum-based Metals/Alloys	0.19
Other Metals	5.62
Other Inorganic Materials	34.20
Cellulosics	3.88
Rubber	5.83
Plastics	34.69
Cements	0.00
Inorganic Matrix	0.75
Organic Matrix	81.57
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	150.47
Packaging Material, Plastic	31.93
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.50E-01
Am-243	4.12E-06
Np-237	4.57E-06
Pu-238	9.55E+00
Pu-239	2.83E+00
Pu-240	6.96E-01
Pu-241	5.77E+00
Pu-242	5.71E-04
Th-229	1.66E-13
Th-230	3.43E-08
Th-232	2.44E-16
U-233	2.50E-10
U-234	4.65E-04
U-235	7.60E-06
U-236	4.84E-07
U-238	9.62E-07

Haz. Waste No(s).

F001, F002

TRUCON Code(s)

112/212, 116/216

Waste Stream Description

Combustible waste generated from facility and equipment operations and maintenance. This waste includes paper, rags, plastic, rubber, wood-based HEPA filters, and plastic-based and cellulose-based waste generated at the facility. Plastic-based waste includes, but may not be limited to, tape, polyethylene and vinyl; gloves; plastic vials; polystyrene; Tygon tubing; polyvinyl chloride plastic; Teflon products; Plexiglas; and dry box gloves (unleaded neoprene base). Cellulose-based waste includes, but may not be limited to, rags, wood, paper, cardboard, laboratory coats and coveralls, booties and cotton gloves, and similar materials. The waste stream may also contain a smaller fraction of non-combustible solids (e.g., scrap metal, crucibles, metal lids, zippers, discarded tools) and a small fraction of homogenous solids, salts, leached solids, ash, hydroxide cakes, crucibles, impure oxides.

Waste Stream ID: LA-TA-55-21

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Metal debris waste (mixed)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	65.7	0.0	65.7
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	1.6	0.0	1.6
Cask - Misc w/ 1 - 30-gal Drum	13.2	0.0	13.2
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Current Form Total	82.4	0.0	82.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	73.6	0.0	73.6
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	75.5	0.0	75.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	119.31
Aluminum-based Metals/Alloys	0.37
Other Metals	11.00
Other Inorganic Materials	66.89
Cellulosics	7.60
Rubber	11.40
Plastics	67.85
Cements	0.00
Inorganic Matrix	1.46
Organic Matrix	159.56
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	132.81
Packaging Material, Plastic	36.48
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.51E-01
Am-243	3.60E-06
Cs-137	2.31E-09
Np-237	5.55E-06
Pu-238	2.70E+01
Pu-239	4.31E+00
Pu-240	1.18E+00
Pu-241	5.16E+00
Pu-242	6.15E-04
Pu-244	3.35E-10
Sr-90	2.08E-09
Th-229	3.86E-13
Th-230	5.68E-07
Th-232	8.67E-16
U-233	3.78E-10
U-234	3.38E-03
U-235	1.19E-06
U-236	1.11E-06
U-238	1.33E-05

Haz. Waste No(s).

D008

TRUCON Code(s)

116/216, 117/217,
125/225

Waste Stream Description

Metal Noncombustible waste including small tools, small equipment, cans, motors, pumps, process equipment, gloveboxes, ventilation ductwork, and pipes. May also contain some glass, ceramic, porcelain, etc. as well as some small fraction of combustible waste (e.g., paper, rubber, plastics).

Waste Stream ID: LA-TA-55-22

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Metal debris waste (non-mixed)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	17.3	0.0	17.3
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.6	0.0	0.6
Other	0.7	0.0	23.9
Current Form Total	41.8	0.0	41.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	17.7	0.0	17.7
SWB Dir Ld w/ Liner	9.5	0.0	9.5
Final Form Total	27.1	0.0	27.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	182.70
Aluminum-based Metals/Alloys	0.57
Other Metals	16.85
Other Inorganic Materials	102.43
Cellulosics	11.63
Rubber	17.45
Plastics	103.91
Cements	0.00
Inorganic Matrix	2.24
Organic Matrix	244.35
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	138.71
Packaging Material, Plastic	24.53
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.37E-01
Am-243	7.97E-07
Cs-137	1.24E-08
Np-237	2.33E-06
Pu-238	6.24E+01
Pu-239	8.40E-01
Pu-240	2.21E-01
Pu-241	1.93E+00
Pu-242	9.97E-05
Pu-244	1.58E-11
Sr-90	1.23E-08
Th-229	1.12E-13
Th-230	1.04E-06
Th-232	5.39E-17
U-233	1.48E-10
U-234	8.36E-03
U-235	7.63E-08
U-236	1.20E-07
U-238	1.49E-10

Haz. Waste No(s).

D008

TRUCON Code(s)

117/217, 125/225

Waste Stream Description

Metal Noncombustible waste including small tools, small equipment, cans, motors, pumps, process equipment, gloveboxes, ventilation ductwork, and pipes. May also contain some glass, ceramic, porcelain, etc. as well as some small fraction of combustible waste (e.g., paper, rubber, plastics).

Waste Stream ID: LA-TA-55-23

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Glass debris waste from PF-4 (mixed)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1.2	0.0	1.2
Cask - Misc w/ 1 - 30-gal Drum	0.8	0.0	0.8
Current Form Total	2.0	0.0	2.0

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	104.81
Aluminum-based Metals/Alloys	0.33
Other Metals	9.67
Other Inorganic Materials	58.76
Cellulosics	6.67
Rubber	10.01
Plastics	59.61
Cements	0.00
Inorganic Matrix	1.28
Organic Matrix	140.18
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.64E-01
Np-237	3.40E-06
Pu-238	9.80E+01
Pu-239	7.71E+00
Pu-240	1.81E+00
Pu-241	8.18E+00
Pu-242	1.20E-04
Th-229	9.09E-14
Th-230	9.70E-07
Th-232	8.98E-16
U-233	1.41E-10
U-234	8.03E-03
U-235	1.98E-07
U-236	1.40E-06
U-238	4.72E-13

No Hazardous Waste Numbers Provided

TRUCON Code(s)
118/218

Waste Stream Description

Glass waste generated from facility and equipment operations and maintenance. This waste includes, but is not limited to, broken glass discarded labware, windows, and bottles. A small fraction of combustible waste, such as plastics (mainly packaging), may also be present in this waste stream.

Waste Stream ID: LA-TA-55-24

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Glass debris waste from PF-4 (non-mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	123.94
Aluminum-based Metals/Alloys	0.39
Other Metals	11.43
Other Inorganic Materials	69.49
Cellulosics	7.89
Rubber	11.84
Plastics	70.49
Cements	0.00
Inorganic Matrix	1.52
Organic Matrix	165.76
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.97E-01
Np-237	1.22E-06
Pu-238	1.43E-01
Pu-239	4.57E+00
Pu-240	1.13E+00
Pu-241	9.69E+00
Pu-242	8.94E-05
Th-229	1.22E-14
Th-230	9.43E-09
Th-232	8.02E-16
U-233	3.07E-11
U-234	7.31E-05
U-235	9.38E-05
U-236	1.33E-06
U-238	2.17E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)
118/218, 125/225

Waste Stream Description

Glass waste generated from facility and equipment operations and maintenance. This waste includes, but is not limited to, broken glass discarded labware, windows, and bottles. A small fraction of combustible waste, such as plastics (mainly packaging), may also be present in this waste stream.

Waste Stream ID: LA-TA-55-25

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	HEPA filter debris (mixed)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	14.79
Aluminum-based Metals/Alloys	0.18
Other Metals	0.18
Other Inorganic Materials	0.18
Cellulosics	4.09
Rubber	0.18
Plastics	3.57
Cements	0.00
Inorganic Matrix	0.18
Organic Matrix	0.18
Soils/gravel	0.18
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.93E+00
Np-237	9.01E-06
Pu-238	5.96E-01
Pu-239	2.39E+01
Pu-240	5.61E+00
Pu-241	2.72E+01
Pu-242	3.45E-04
Th-229	2.03E-13
Th-230	4.97E-09
Th-232	2.37E-15
U-233	3.42E-10
U-234	4.47E-05
U-235	5.65E-07
U-236	4.00E-06
U-238	1.25E-12

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

HEPA filters generated from facility and equipment operations and Maintenance.

Waste Stream ID: LA-TA-55-26

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Hepa Filters	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	46.54
Aluminum-based Metals/Alloys	0.19
Other Metals	5.58
Other Inorganic Materials	30.18
Cellulosics	3.85
Rubber	5.78
Plastics	17.82
Cements	0.00
Inorganic Matrix	0.74
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.33E-02
Np-237	1.69E-06
Pu-238	2.98E+01
Pu-239	3.86E-01
Pu-240	1.01E-01
Pu-241	1.10E+00
Pu-242	1.56E-05
Th-229	8.25E-14
Th-230	1.06E-07
Th-232	1.89E-17
U-233	1.12E-10
U-234	1.44E-03
U-235	6.09E-09
U-236	4.77E-08
U-238	3.77E-14

No Hazardous Waste Numbers Provided

TRUCON Code(s)

119/219

Waste Stream Description

Hepa Filters

Waste Stream ID: LA-TA-55-27

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3120	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Inorganic Solid Waste				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	32.53
Aluminum-based Metals/Alloys	0.13
Other Metals	3.90
Other Inorganic Materials	21.09
Cellulosics	2.69
Rubber	4.04
Plastics	12.45
Cements	0.00
Inorganic Matrix	0.52
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.98E-03
Np-237	2.44E-08
Pu-238	1.49E-03
Pu-239	6.16E-02
Pu-240	1.44E-02
Pu-241	6.55E-02
Pu-242	8.32E-07
Th-229	5.99E-16
Th-230	1.35E-11
Th-232	6.59E-18
U-233	9.66E-13
U-234	1.17E-07
U-235	1.52E-09
U-236	1.07E-08
U-238	3.14E-15

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Inorganic Solid Waste

Waste Stream ID: LA-TA-55-29

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Leaded Gloves	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	3.5	0.0	3.5
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.3	0.0	0.3
Current Form Total	3.9	0.0	3.9

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	203.01
Aluminum-based Metals/Alloys	0.63
Other Metals	18.72
Other Inorganic Materials	113.82
Cellulosics	12.93
Rubber	19.39
Plastics	115.46
Cements	0.00
Inorganic Matrix	2.49
Organic Matrix	271.51
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.36E-01
Am-243	3.35E-05
Np-237	1.62E-05
Pu-238	5.54E+02
Pu-239	5.46E-01
Pu-240	2.65E-01
Pu-241	1.64E+00
Pu-242	2.58E-04
Th-229	6.31E-13
Th-230	1.30E-05
Th-232	3.80E-17
U-233	9.67E-10
U-234	1.15E-01
U-235	7.54E-09
U-236	1.10E-07
U-238	5.44E-13

Haz. Waste No(s).

D008

TRUCON Code(s)

123/223

Waste Stream Description

Leaded Gloves

Waste Stream ID: LA-TA-55-30

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Non-combustible and combustible debris waste (mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	135.4	143.1	278.5
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	7.1	0.0	7.1
Box - Crate	3.6	0.0	7.2
Cask - Misc w/ 1 - 30-gal Drum	27.2	0.0	27.2
Other	2.6	0.0	340.2
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Current Form Total	519.0	143.1	662.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	149.6	143.1	292.7
SWB Dir Ld w/ Liner	209.8	0.0	209.8
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	361.2	143.1	504.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	148.38
Aluminum-based Metals/Alloys	0.35
Other Metals	10.23
Other Inorganic Materials	31.11
Cellulosics	7.06
Rubber	10.60
Plastics	31.90
Cements	121.09
Inorganic Matrix	55.50
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	140.54
Packaging Material, Plastic	22.03
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.67E-01
Am-243	3.02E-07
Cs-137	2.02E-09
Np-237	3.15E-06
Pu-238	2.31E+01
Pu-239	1.92E+00
Pu-240	6.05E-01
Pu-241	4.16E+00
Pu-242	4.09E-04
Pu-244	1.21E-10
Sr-90	1.93E-09
Th-229	2.42E-09
Th-230	4.46E-07
Th-232	4.85E-16
U-233	1.72E-10
U-234	2.74E-03
U-235	1.83E-06
U-236	5.99E-07
U-238	2.07E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

TRUCON Code(s)

116/216, 117/217, 122/222, 125/225

Waste Stream Description

Non-combustible and combustible waste generated from facility and equipment operations and maintenance. This waste includes, but may not be limited to, small tools, small equipment, cans, motors, pumps, process equipment, gloveboxes, ventilation ductwork, metal-based HEPA filters, pipes, glass, graphite, slag and crucibles, salt, discarded lab ware, windows, and bottles. The waste stream may also contain a smaller fraction of combustible solids (e.g., paper, rags, plastic, rubber, leaded gloves) and a small fraction of homogeneous solids (e.g., leached solids, ash, hydroxide cakes, impure oxides).

Waste Stream ID: LA-TA-55-30-S

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-LA-TA-55-30	10.6
55-gal Drum Dir Ld w/o Liner	WP-LA-TA-55-30	79.0
SWB w/ 4 - 55-gal Drums w/o Liners	WP-LA-TA-55-30	5.7
Shipped Total		95.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	213.70
Aluminum-based Metals/Alloys	0.41
Other Metals	2.45
Other Inorganic Materials	18.28
Cellulosics	11.63
Rubber	1.41
Plastics	14.23
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.75
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.22E+00
Am-243	6.83E-05
Cs-137	8.43E-05
Np-237	8.31E-05
Pu-238	4.70E-01
Pu-239	2.59E+00
Pu-240	7.30E-01
Pu-241	8.25E+00
Pu-242	6.28E-04
Sr-90	8.40E-05
Th-229	5.60E-08
Th-230	5.67E-09
Th-232	3.44E-07
U-233	9.96E-05
U-234	1.09E-04
U-235	2.28E-06
U-236	1.30E-07
U-238	5.85E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: LA-TA-55-31

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Miscellaneous NonCombustible Debris Waste	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	19.8	0.0	19.8
Other	2.3	0.0	2.3
Current Form Total	22.1	0.0	22.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	19.8	0.0	19.8
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Final Form Total	21.7	0.0	21.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	203.28
Aluminum-based Metals/Alloys	0.63
Other Metals	18.75
Other Inorganic Materials	113.97
Cellulosics	12.94
Rubber	19.42
Plastics	115.61
Cements	0.00
Inorganic Matrix	2.49
Organic Matrix	271.87
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	132.78
Packaging Material, Plastic	33.87
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.98E-01
Am-243	1.29E-07
Np-237	1.71E-06
Pu-238	1.39E-01
Pu-239	4.82E+00
Pu-240	1.10E+00
Pu-241	6.62E+00
Pu-242	7.40E-04
Pu-244	6.35E-10
Th-229	3.48E-14
Th-230	2.75E-08
Th-232	9.31E-16
U-233	6.13E-11
U-234	1.57E-04
U-235	4.71E-06
U-236	1.27E-06
U-238	1.10E-08

Haz. Waste No(s).

D008

TRUCON Code(s)

117/217

Waste Stream Description

Miscellaneous NonCombustible Debris Waste

Waste Stream ID: LA-TA-55-32

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3120	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Homogeneous inorganic solids (mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	5.4	0.0	5.4
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	1.0	0.0	1.0
Cask - Misc w/ 1 - 30-gal Drum	0.4	0.0	0.4
SWB w/ 4 - 55-gal Drums w/ Liners	3.8	0.0	3.8
Current Form Total	10.6	0.0	10.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	6.2	0.0	6.2
SWB w/ 4 - 55-gal Drums w/ Liners	3.8	0.0	3.8
Final Form Total	10.0	0.0	10.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	30.50
Aluminum-based Metals/Alloys	0.09
Other Metals	2.81
Other Inorganic Materials	17.10
Cellulosics	1.94
Rubber	2.91
Plastics	17.35
Cements	0.00
Inorganic Matrix	0.37
Organic Matrix	40.80
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	161.09
Packaging Material, Plastic	29.19
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.99E-01
Am-243	7.39E-06
Cs-137	3.01E-08
Np-237	8.88E-06
Pu-238	2.66E+02
Pu-239	2.08E+00
Pu-240	5.98E-01
Pu-241	4.34E+00
Pu-242	1.51E-03
Pu-244	1.31E-09
Sr-90	2.96E-08
Th-229	7.75E-13
Th-230	4.91E-06
Th-232	1.55E-15
U-233	7.32E-10
U-234	3.19E-02
U-235	7.62E-06
U-236	1.48E-06
U-238	7.04E-08

Haz. Waste No(s).

D008

TRUCON Code(s)

124/224, 125/225,
130/230

Waste Stream Description

Homogeneous Inorganic Solids Solidified inorganic process solids generated from facility and equipment operations and maintenance. This waste consists of large chunks of filter cakes and salts.

Waste Stream ID: LA-TA-55-33

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3120	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Absorbed organics from all wings of PF4 (mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1.7	0.0	1.7
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	1.3	0.0	1.3
Current Form Total	3.0	0.0	3.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.5	0.0	2.5
Final Form Total	2.5	0.0	2.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	254.29
Aluminum-based Metals/Alloys	0.21
Other Metals	141.79
Other Inorganic Materials	7.32
Cellulosics	35.37
Rubber	0.61
Plastics	2.93
Cements	7.35
Inorganic Matrix	6.39
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.52E-02
Np-237	3.49E-07
Pu-238	1.94E-02
Pu-239	1.96E-01
Pu-240	9.58E-02
Pu-241	7.52E-01
Pu-242	2.90E-05
Th-229	1.01E-14
Th-230	2.09E-10
Th-232	5.12E-17
U-233	1.51E-11
U-234	1.66E-06
U-235	5.23E-09
U-236	7.68E-08
U-238	1.18E-13

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Solidified Organics (absorbed organics on vermiculite) from all wings of PF4. Organic liquids (solvents and oils) generated from facility and equipment operations and maintenance and absorbed on vermiculite. Hazardous materials such as methylene chloride and carbon tetrachloride may be present but PCB's are NOT expected.

Waste Stream ID: **LA-TA-55-34**

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Uncemented inorganics (mixed)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
110-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.4	0.0	0.4
55-gal Drum Dir Ld w/ Liner	39.7	0.0	39.7
55-gal POC - 12" w/ Liner	8.1	0.0	8.1
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	34.8	0.0	34.8
Current Form Total	83.0	0.0	83.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	62.4	0.0	62.4
55-gal POC - 12" w/ Liner	8.1	0.0	8.1
Final Form Total	70.5	0.0	70.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	2320.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	176.43
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	15.82
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.11E+00
Np-237	2.56E-05
Pu-238	8.46E-01
Pu-239	2.59E+01
Pu-240	6.53E+00
Pu-241	3.27E+01
Pu-242	2.01E-03
Pu-244	1.37E-09
Th-229	3.20E-07
Th-230	5.13E-08
Th-232	3.33E-15
U-233	1.37E-04
U-234	2.60E-04
U-235	8.58E-06
U-236	5.12E-06
U-238	3.97E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

TRUCON Code(s)

124/224

Waste Stream Description

Uncemented inorganics from all wings of PF4 including nitrate salts generated from TA-55 nitrate operations

Waste Stream ID: **LA-TA-55-36**

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Solidified Inorganic				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.3	0.0	0.3
Current Form Total	0.3	0.0	0.3

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	637.79
Aluminum-based Metals/Alloys	1.98
Other Metals	58.82
Other Inorganic Materials	357.58
Cellulosics	40.61
Rubber	60.92
Plastics	362.72
Cements	0.00
Inorganic Matrix	7.82
Organic Matrix	852.99
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.81E+01
Np-237	4.22E-04
Pu-238	5.13E-01
Pu-239	2.02E+01
Pu-240	4.73E+00
Pu-241	2.88E+01
Pu-242	2.74E-04
Th-229	1.03E-11
Th-230	2.61E-09
Th-232	1.25E-15
U-233	1.74E-08
U-234	2.98E-05
U-235	3.80E-07
U-236	2.67E-06
U-238	7.85E-13

Haz. Waste No(s).

D006, D007, D008

TRUCON Code(s)

114/214

Waste Stream Description

Solidified Inorganic

Waste Stream ID: **LA-TA-55-38**

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Cemented inorganics (mixed)				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.3	0.0	0.3
Cask - Misc w/ 1 - 30-gal Drum	5.2	0.0	5.2
Current Form Total	6.1	0.0	6.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	3.5	0.0	3.5
Final Form Total	3.5	0.0	3.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	359.73
Aluminum-based Metals/Alloys	1.12
Other Metals	33.18
Other Inorganic Materials	201.68
Cellulosics	22.91
Rubber	34.36
Plastics	204.58
Cements	0.00
Inorganic Matrix	4.41
Organic Matrix	481.11
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.21E-01
Np-237	1.24E-06
Pu-238	6.12E+02
Pu-239	3.83E-01
Pu-240	1.50E-01
Pu-241	2.39E+00
Pu-242	1.08E-04
Th-229	3.87E-14
Th-230	7.11E-06
Th-232	8.61E-17
U-233	5.55E-11
U-234	5.44E-02
U-235	1.06E-08
U-236	1.24E-07
U-238	4.54E-13

Haz. Waste No(s).

D008

No TRUCON Codes Provided

Waste Stream Description

Cemented Inorganics and Spent Samples Solidified inorganic process solids generated from facility and equipment operations and maintenance. This waste includes process leached solids, ash, filter cakes, salts, metal oxides, fines, evaporator bottoms, and sample residues (received from the CMR building) stabilized in Portland or gypsum cement.

Waste Stream ID: LA-TA-55-39

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Salt Waste	Waste Matrix Code	S3140	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Pyrochemical salts (mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	54.3	0.0	54.3
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	23.2	0.0	23.2
Current Form Total	77.5	0.0	77.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	69.3	0.0	69.3
Final Form Total	69.3	0.0	69.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	257.70
Aluminum-based Metals/Alloys	0.00
Other Metals	302.90
Other Inorganic Materials	6.80
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.14E+00
Np-237	2.02E-05
Pu-238	1.45E+00
Pu-239	4.89E+01
Pu-240	1.15E+01
Pu-241	5.45E+01
Pu-242	3.92E-03
Pu-244	2.99E-09
Th-229	4.98E-13
Th-230	1.36E-08
Th-232	5.28E-15
U-233	8.03E-10
U-234	1.15E-04
U-235	1.26E-06
U-236	8.55E-06
U-238	5.51E-10

Haz. Waste No(s).

D008

TRUCON Code(s)

124/224

Waste Stream Description

Pyrochemical salt waste consisting of used chloride salts from pyrochemical processes such as electrorefining, molten salt extraction, salt stripping, fluoride reduction, and direct oxide reduction. A small fraction of combustible waste, such as plastics (mainly packaging), may also be present in this waste stream.

Waste Stream ID: **LA-TA-55-43**

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combustible/noncombustible debris containing Pu-238 (non-mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1.2	0.0	1.2
SWB w/ 4 - 55-gal Drums w/ Liners	64.3	0.0	64.3
Current Form Total	65.5	0.0	65.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1.2	0.0	1.2
SWB w/ 4 - 55-gal Drums w/ Liners	64.3	0.0	64.3
Final Form Total	65.5	0.0	65.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	28.24
Aluminum-based Metals/Alloys	0.08
Other Metals	3.34
Other Inorganic Materials	19.03
Cellulosics	5.54
Rubber	2.81
Plastics	17.27
Cements	0.00
Inorganic Matrix	0.62
Organic Matrix	33.71
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	209.57
Packaging Material, Plastic	16.69
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.04E-03
Am-243	2.99E-08
Np-237	1.60E-07
Pu-238	4.58E+00
Pu-239	8.66E-03
Pu-240	2.92E-03
Pu-241	3.83E-02
Pu-242	2.66E-06
Th-229	1.88E-14
Th-230	7.43E-08
Th-232	2.28E-08
U-233	1.60E-11
U-234	4.99E-04
U-235	1.38E-09
U-236	2.25E-09
U-238	1.04E-14

Haz. Waste No(s).

D008

TRUCON Code(s)

116/216, 117/217,
125/225

Waste Stream Description

Combustible/noncombustible debris including paper, rags, plastic, rubber, and plastic-based and cellulose-based waste generated during 238Pu activities. Plastic-based waste includes, but may not be limited to: tape, polyethylene and vinyl; gloves; plastic vials, polystyrene; tygon tubing; polyvinyl chloride plastic; Teflon products; plexiglass; and dry box gloves (unleaded neoprene base). Cellulosebased waste includes, but may not be limited to: rags, wood, paper, and cardboard; laboratory coats and overalls; booties and cotton gloves, and similar materials. The waste may also contain HEPA filters, noncombustible glass and metallic debris. Some of this waste was packaged in small metal cans before being placed in 55 Gallon drums.

Waste Stream ID: LA-TA-55-43.01-S

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
SWB Dir Ld w/o Liner	WP-LA-TA-55-43.01	190.9
Shipped Total		190.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	45.68
Aluminum-based Metals/Alloys	0.11
Other Metals	0.38
Other Inorganic Materials	0.13
Cellulosics	1.22
Rubber	0.19
Plastics	8.86
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.74E-03
Am-243	7.54E-08
Np-237	2.04E-07
Pu-238	2.78E+00
Pu-239	2.44E-03
Pu-240	4.00E-03
Pu-241	2.73E-02
Pu-242	2.79E-06
Th-229	3.25E-15
Th-230	1.72E-08
Th-232	2.40E-08
U-233	7.76E-12
U-234	2.49E-04
U-235	2.17E-11
U-236	1.07E-09
U-238	3.79E-15

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **LA-TA-55-46**

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	MIXED NONCOMBUSTIBLE DEBRIS WASTE			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	78.64
Aluminum-based Metals/Alloys	0.24
Other Metals	7.25
Other Inorganic Materials	44.09
Cellulosics	5.01
Rubber	7.51
Plastics	44.73
Cements	0.00
Inorganic Matrix	0.96
Organic Matrix	105.18
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.54E-04
Np-237	1.89E-09
Pu-238	3.48E-01
Pu-239	2.47E-04
Pu-240	1.26E-04
Pu-241	3.36E-03
Pu-242	1.01E-07
Th-229	4.69E-17
Th-230	2.19E-09
Th-232	4.07E-20
U-233	7.67E-14
U-234	2.26E-05
U-235	5.11E-12
U-236	7.84E-11
U-238	3.21E-16

Haz. Waste No(s).

D006, D007, D008,
D009, D010

TRUCON Code(s)

125/225

Waste Stream Description

MIXED NONCOMBUSTIBLE DEBRIS WASTE

Waste Stream ID: LA-TA-55-47

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	HEPA FILTERS	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Current Form Total	1.9	0.0	1.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	39.08
Aluminum-based Metals/Alloys	0.12
Other Metals	3.60
Other Inorganic Materials	21.91
Cellulosics	2.49
Rubber	3.73
Plastics	22.23
Cements	0.00
Inorganic Matrix	0.48
Organic Matrix	52.27
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	211.10
Packaging Material, Plastic	16.30
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.47E-04
Np-237	2.15E-09
Pu-238	3.90E-04
Pu-239	1.48E-02
Pu-240	3.46E-03
Pu-241	2.67E-02
Pu-242	2.00E-07
Th-229	1.56E-17
Th-230	1.05E-12
Th-232	4.97E-19
U-233	4.58E-14
U-234	1.64E-08
U-235	2.04E-10
U-236	1.44E-09
U-238	4.22E-16

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

HEPA FILTERS

Waste Stream ID: LA-TA-55-50

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Organics	Waste Matrix Code	S3200	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Solidified Organics	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1.2	0.0	1.2
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Current Form Total	3.1	0.0	3.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1.2	0.0	1.2
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	3.1	0.0	3.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.01
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.01
Cellulosics	0.00
Rubber	0.00
Plastics	0.76
Cements	0.00
Inorganic Matrix	142.23
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	179.16
Packaging Material, Plastic	24.53
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.03E-03
Np-237	3.66E-08
Pu-238	7.70E-01
Pu-239	4.95E-02
Pu-240	1.16E-02
Pu-241	1.13E-01
Pu-242	8.46E-07
Th-229	4.65E-16
Th-230	1.04E-09
Th-232	8.50E-19
U-233	1.13E-12
U-234	2.27E-05
U-235	4.89E-10
U-236	3.44E-09
U-238	1.28E-15

No Hazardous Waste Numbers Provided

TRUCON Code(s)
112/212

Waste Stream Description

Solidified Organics

Waste Stream ID: LA-TA-55-53

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Salt Waste	Waste Matrix Code	S3140	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Pyrochemical salts from PF-4 (mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	11.9	0.0	11.9
Current Form Total	11.9	0.0	11.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	11.9	0.0	11.9
Final Form Total	11.9	0.0	11.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.40
Aluminum-based Metals/Alloys	0.18
Other Metals	0.21
Other Inorganic Materials	3.72
Cellulosics	0.18
Rubber	0.18
Plastics	0.35
Cements	508.10
Inorganic Matrix	127.04
Organic Matrix	162.88
Soils/gravel	20.17
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.54E+00
Np-237	7.07E-06
Pu-238	8.13E-01
Pu-239	2.57E+01
Pu-240	6.35E+00
Pu-241	6.97E+01
Pu-242	4.62E-04
Th-229	2.16E-14
Th-230	5.27E-10
Th-232	2.28E-16
U-233	1.01E-10
U-234	1.66E-05
U-235	1.77E-07
U-236	1.32E-06
U-238	4.88E-13

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D021, D022, D035, D039, D040, F001, F002, F005, P120

TRUCON Code(s)

124/224

Waste Stream Description

Pyrochemical salt waste (homogeneous) consisting of used chloride salts from pyrochemical processes such as electrorefining, molten salt extraction, salt stripping, fluoride reduction, and direct oxide reduction. A small fraction of combustible waste, such as plastics (mainly packaging), may also be present in this waste stream.

Waste Stream ID: LA-TA-55-54

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SALT, SLAG, AND CRUCIBLE ITEMS			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	102.15
Aluminum-based Metals/Alloys	0.32
Other Metals	9.42
Other Inorganic Materials	57.27
Cellulosics	6.50
Rubber	9.76
Plastics	58.09
Cements	0.00
Inorganic Matrix	1.25
Organic Matrix	136.61
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.97E-03
Np-237	3.45E-08
Pu-238	6.99E-04
Pu-239	2.93E-02
Pu-240	6.95E-03
Pu-241	2.89E-02
Pu-242	3.94E-07
Th-229	1.36E-15
Th-230	6.92E-12
Th-232	3.44E-18
U-233	1.78E-12
U-234	5.72E-08
U-235	7.52E-10
U-236	5.36E-09
U-238	1.54E-15

Haz. Waste No(s).

D007, D008, D009

TRUCON Code(s)

122/222

Waste Stream Description

SALT, SLAG, AND CRUCIBLE ITEMS

Waste Stream ID: LA-TA-55-60

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Metal debris waste from all wings of PF4 (non-mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Crate	1.6	0.0	62.4
Box - FRP	0.1	0.0	1.1
Other	2.1	0.0	60.6
Current Form Total	124.1	0.0	124.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	75.6	0.0	75.6
Final Form Total	75.6	0.0	75.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	258.16
Aluminum-based Metals/Alloys	0.00
Other Metals	294.54
Other Inorganic Materials	6.80
Cellulosics	1.96
Rubber	0.03
Plastics	0.16
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.64E-02
Np-237	4.94E-05
Pu-238	1.30E-01
Pu-239	1.68E-01
Pu-240	5.81E-02
Pu-241	7.90E-01
Pu-242	5.34E-03
Pu-244	5.06E-09
Th-229	7.87E-12
Th-230	1.51E-09
Th-232	3.34E-17
U-233	5.99E-09
U-234	1.16E-05
U-235	4.65E-09
U-236	4.84E-08
U-238	4.70E-09

Haz. Waste No(s).

D008, D011

TRUCON Code(s)

117/217

Waste Stream Description

Noncombustible scrap items generated from facility and equipment decontamination and decommissioning. This waste includes small tools, cans, small equipment items, motors, pumps, and process equipment. A small fraction of combustible waste, such as plastics (mainly packaging) may also be present in this waste stream.

Waste Stream ID: LA-TA-55-61

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Metal debris waste from all wings of PF-4 (mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Crate	3.1	0.0	120.2
Box - FRP	1.4	0.0	15.0
Other	1.5	0.0	61.2
Current Form Total	196.4	0.0	196.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	119.1	0.0	119.1
Final Form Total	119.1	0.0	119.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	257.70
Aluminum-based Metals/Alloys	0.00
Other Metals	302.90
Other Inorganic Materials	6.80
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.02E-02
Np-237	2.74E-07
Pu-238	4.41E-01
Pu-239	2.14E-01
Pu-240	7.33E-02
Pu-241	5.59E-01
Pu-242	1.49E-04
Pu-244	1.26E-10
Th-229	8.13E-15
Th-230	4.36E-09
Th-232	3.63E-17
U-233	1.20E-11
U-234	3.61E-05
U-235	5.50E-09
U-236	5.66E-08
U-238	5.86E-13

Haz. Waste No(s).

D008

TRUCON Code(s)

117/217

Waste Stream Description

Metal waste generated from facility and equipment decontamination and decommissioning activities. This waste includes small tools, cans, small equipment items, motors, pumps, and process equipment. This waste also includes gloveboxes and associated ducting, equipment, and construction debris associated with the removal of gloveboxes. A small fraction of combustible waste, such as plastics (mainly packaging), may also be present in this waste stream.

Waste Stream ID: LA-TA-55-62

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combustible/noncombustible debris waste from all wings of PF-4 (mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Crate	7.3	0.0	23.1
Current Form Total	23.1	0.0	23.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	15.1	0.0	15.1
Final Form Total	15.1	0.0	15.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	272.60
Aluminum-based Metals/Alloys	0.00
Other Metals	30.30
Other Inorganic Materials	6.80
Cellulosics	64.00
Rubber	1.10
Plastics	5.30
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.53E-02
Np-237	8.21E-08
Pu-238	4.94E-03
Pu-239	4.21E-02
Pu-240	2.02E-02
Pu-241	1.77E-01
Pu-242	6.71E-06
Th-229	2.38E-15
Th-230	5.31E-11
Th-232	1.08E-17
U-233	3.54E-12
U-234	4.22E-07
U-235	1.12E-09
U-236	1.62E-08
U-238	2.73E-14

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Combustible waste generated from facility and equipment decontamination and decommissioning activities. Combustible waste includes paper, rags, plastic, rubber, and plastic-based and cellulose-based waste. Noncombustible waste includes items such as small tools, cans, small equipment items, and broken glass.

Waste Stream ID: LA-TA-55-63

Appendix A

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	HEPA filter debris from all wings of PF-4 (mixed)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Crate	3.2	0.0	3.2
Current Form Total	3.2	0.0	3.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	3.8	0.0	3.8
Final Form Total	3.8	0.0	3.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	272.60
Aluminum-based Metals/Alloys	0.00
Other Metals	30.30
Other Inorganic Materials	6.80
Cellulosics	64.00
Rubber	1.10
Plastics	5.30
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.55E-03
Np-237	1.82E-08
Pu-238	1.54E-03
Pu-239	6.16E-02
Pu-240	1.44E-02
Pu-241	7.95E-02
Pu-242	8.33E-07
Th-229	3.09E-16
Th-230	9.66E-12
Th-232	4.66E-18
U-233	5.98E-13
U-234	9.95E-08
U-235	1.28E-09
U-236	8.97E-09
U-238	2.64E-15

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

HEPA filters generated from facility and equipment operations and maintenance

Waste Stream ID: **LB-T001**

Appendix A

TRU Waste Inventory Profile Report

Site	Lawrence Berkeley Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	LBL-Non Mixed Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
12.2-gal Drum	0.0	0.0	0.1
30-gal Drum	0.1	0.0	0.1
55-gal Drum Dir Ld w/o Liner	0.2	0.0	0.2
5-gal Drum	0.0	0.0	0.0
Current Form Total	0.4	0.0	0.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.4	0.2	0.6
Final Form Total	0.4	0.2	0.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	11.10
Aluminum-based Metals/Alloys	0.00
Other Metals	2.63
Other Inorganic Materials	1.68
Cellulosics	4.57
Rubber	0.00
Plastics	5.28
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.86E-02
Am-243	2.00E-03
Np-237	1.70E-04
Pu-238	1.14E-04
Pu-239	1.90E-03
Pu-240	4.70E-04
Pu-241	1.80E-04
Pu-242	4.20E-05
Pu-244	2.17E-13
Th-229	1.63E-07
Th-230	5.43E-14
Th-232	5.00E-09
U-233	2.90E-04
U-234	2.00E-09
U-235	1.10E-07
U-236	8.36E-11
U-238	1.60E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s) 125/225

Waste Stream Description

Heterogeneous transuranic, non mixed waste

Waste Stream ID: **LB-T002**

Appendix A

TRU Waste Inventory Profile Report

Site	Lawrence Berkeley Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	LBL - Mixed Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
12.2-gal Drum	0.1	0.0	0.2
2.5-gal Drum	0.0	0.0	0.0
5-gal Drum	0.2	0.0	0.2
Current Form Total	0.3	0.0	0.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.2	0.2	0.4
Final Form Total	0.2	0.2	0.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.72
Other Inorganic Materials	16.90
Cellulosics	7.40
Rubber	0.00
Plastics	6.50
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.08E-02
Am-243	2.50E-04
Cs-137	2.83E-09
Np-237	3.50E-03
Pu-238	6.04E-03
Pu-239	5.50E-02
Pu-240	7.99E-05
Pu-241	1.60E-02
Pu-242	4.30E-05
Pu-244	2.90E-05
Th-229	1.60E-10
Th-230	1.88E-11
Th-232	1.32E-20
U-233	2.27E-07
U-234	2.73E-07
U-235	4.81E-07
U-236	3.56E-11
U-238	1.90E-08

Haz. Waste No(s).

D005, D006, D007, D008, D009, D010, D011, D018, D022, D028, D035, D039, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Heterogeneous transuranic mixed waste

Waste Stream ID: **LB-T003**

Appendix A

TRU Waste Inventory Profile Report

Site	Lawrence Berkeley Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	TRU Mixed waste sources			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
12.2-gal Drum	0.0	0.0	0.1
5-gal Drum	0.0	0.0	0.0
Current Form Total	0.1	0.0	0.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal S100 POC - 6" w/ Liner	0.2	0.2	0.4
Final Form Total	0.2	0.2	0.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.35
Aluminum-based Metals/Alloys	0.00
Other Metals	5.14
Other Inorganic Materials	0.00
Cellulosics	0.39
Rubber	0.03
Plastics	0.08
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	320.70
Packaging Material, Plastic	713.00
Packaging Material, Cellulosics	69.70
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.27E-01
Cm-244	6.08E-03
Np-237	5.42E-07
Pu-240	1.37E-05
Th-229	6.22E-15
Th-232	8.62E-22
U-233	1.53E-11
U-236	3.38E-12

Haz. Waste No(s).

D008

TRUCON Code(s)

125/225

Waste Stream Description

Mixed waste sources

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

Appendix A

TRU Waste Inventory Profile Report

Site	Lawrence Livermore National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5440	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-BLCHDN.001	0.2
55-gal Drum Dir Ld w/o Liner	WP-BLCHDN.001	1.5
Shipped Total		1.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	61.42
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	13.70
Cellulosics	5.41
Rubber	1.80
Plastics	40.99
Cements	0.00
Inorganic Matrix	11.12
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.57E-02
Am-243	1.34E-03
Cm-244	1.18E-01
Np-237	5.38E-04
Pu-238	5.24E-02
Pu-239	3.26E-07
Pu-240	3.96E-05
Pu-241	2.15E-05
Th-229	9.89E-13
Th-230	6.12E-12
Th-232	8.94E-23
U-233	7.03E-09
U-234	4.52E-07
U-235	4.86E-16
U-236	1.79E-12

Haz. Waste No(s).

F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: LL-M001

Appendix A

TRU Waste Inventory Profile Report

Site	Lawrence Livermore National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	R&D Glovebox Waste (Form 1)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	17.5	15.0	32.4
55-gal Drum Dir Ld w/o Liner	52.0	224.6	276.6
55-gal POC - 12" w/o Liner	2.9	15.4	18.3
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Current Form Total	74.3	255.0	329.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	17.5	15.0	32.4
55-gal Drum Dir Ld w/o Liner	52.8	224.6	277.5
55-gal POC - 12" w/o Liner	2.9	15.4	18.3
Final Form Total	73.2	255.0	328.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	52.86
Aluminum-based Metals/Alloys	8.07
Other Metals	11.05
Other Inorganic Materials	10.52
Cellulosics	37.38
Rubber	20.12
Plastics	33.94
Cements	10.52
Inorganic Matrix	3.44
Organic Matrix	0.36
Soils/gravel	0.10
Vitrified	0.00
Packaging Material, Steel	152.92
Packaging Material, Plastic	3.66
Packaging Material, Cellulosics	7.67
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.34E+00
Am-243	7.03E-04
Cm-244	2.21E+00
Cs-137	1.60E-03
Np-237	5.95E-05
Pu-238	5.55E+00
Pu-239	3.75E+00
Pu-240	1.14E+00
Pu-241	1.35E+01
Pu-242	3.58E-04
Sr-90	1.60E-03
Th-229	5.78E-05
Th-230	6.90E-07
Th-232	4.02E-08
U-233	2.17E-02
U-234	9.00E-05
U-235	4.94E-06
U-238	1.16E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D035, D040, F001, F002, F005

TRUCON Code(s)

116/216

Waste Stream Description

Specific waste items in this waste stream may include paper cartons, cardboard, Kimwipes, cotton swabs, tissues, cheesecloth, grinding paper, plastic (e.g., bags, sheet, tape, containers, pipette tips, and glovebox windows), Neoprene and Hypalon gloves (leaded and non-leaded), aluminum foil, tin cans, hardware (e.g., nuts, bolts, washers, fittings, gauges, fixtures, thermocouples), metal tools (e.g., screwdrivers and pliers), metal parts, equipment (with or without circuit boards), copper (wire, tubing, flanges, rods, and molds), sealed sources, aerosol cans, glass (e.g., beakers, vials, and ion exchange columns with resin), graphite molds, crucibles (magnesium oxide, tantalum), epoxy resin chunks, lead metal (e.g., bricks, foil), Kaufman cans (lead seams), lead-lined and cadmium-lined steel cans, mercury batteries, fluorescent and incandescent light bulbs, and small quantities of pyrochemical salts and solidified aqueous or organic liquids (individual drums contain less than 50 percent, by volume, solidified liquids, and/or salts).

Waste Stream ID: LL-M001-S5400-S

Appendix A

TRU Waste Inventory Profile Report

Site	Lawrence Livermore National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-LL-M001-S5400	136.4
55-gal Drum Dir Ld w/o Liner	WP-LL-M001-S5400	2.9
SWB w/ 4 - 55-gal Drums w/ Liners	WP-LL-M001-S5400	3.8
Shipped Total		143.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	88.62
Aluminum-based Metals/Alloys	2.36
Other Metals	3.76
Other Inorganic Materials	7.07
Cellulosics	5.01
Rubber	11.09
Plastics	57.87
Cements	0.00
Inorganic Matrix	14.54
Organic Matrix	3.08
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.05E+00
Am-243	9.47E-05
Cm-244	2.13E-01
Cs-137	1.44E-07
Np-237	5.11E-04
Pu-238	2.49E+00
Pu-239	4.18E+00
Pu-240	1.17E+00
Pu-241	1.44E+01
Pu-242	2.21E-04
Sr-90	1.41E-07
Th-229	9.37E-13
Th-230	3.82E-09
Th-232	7.74E-18
U-233	6.67E-09
U-234	1.52E-04
U-235	3.48E-06
U-236	1.04E-07
U-238	2.47E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D035, D040, F001, F002, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: LL-T004

Appendix A

TRU Waste Inventory Profile Report

Site	Lawrence Livermore National Laboratory	Final Waste Form	Salt Waste	Waste Matrix Code	S3141	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Pyrochemical salt waste (Form 4)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.65E+01
Cm-244	1.57E-03
Np-237	6.24E-05
Pu-238	1.35E+00
Pu-239	3.42E+00
Pu-240	1.67E+00
Pu-241	2.26E+01
Pu-242	1.04E-03

No Hazardous Waste Numbers Provided

TRUCON Code(s)
124/224

Waste Stream Description

The waste consists primarily of used chloride and fluoride salts from pyrochemical processes such as electrorefining, molten salt extraction, and direct oxide reduction. There may also be up to 20% heterogeneous organic glovebox bagout waste packaged with the salt waste. This waste does not contain any RCRA listed hazardous materials.

Waste Stream ID: LL-T005

Appendix A

TRU Waste Inventory Profile Report

Site	Lawrence Livermore National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	R&D Historical Waste	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	3.37
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	10.77
Cellulosics	11.45
Rubber	0.00
Plastics	6.73
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	35.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.63E-02
Cs-137	1.88E-02
Pu-238	6.77E-04
Pu-239	1.44E-02
Pu-240	3.32E-03
Pu-241	9.70E-02
Pu-242	3.92E-07
Sr-90	1.88E-02

No Hazardous Waste Numbers Provided

TRUCON Code(s)
116/216

Waste Stream Description

Historical NTS shot samples and debris

Waste Stream ID: LL-W018a

Appendix A

TRU Waste Inventory Profile Report

Site	Lawrence Livermore National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5100	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combined metal scrap & incidental combust.(Form 3)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Misc	7.1	0.0	154.7
SLB2 (5' x 5' x 8) Dir Ld	0.0	101.9	101.9
SWB Dir Ld w/o Liner	18.9	132.3	151.2
Current Form Total	173.6	234.2	407.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
SLB2 (5' x 5' x 8) Dir Ld	158.5	101.9	260.4
SWB Dir Ld w/o Liner	18.9	132.3	151.2
Final Form Total	177.4	234.2	411.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	150.00
Aluminum-based Metals/Alloys	20.00
Other Metals	10.00
Other Inorganic Materials	5.00
Cellulosics	5.00
Rubber	2.00
Plastics	20.00
Cements	1.00
Inorganic Matrix	0.00
Organic Matrix	2.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	193.23
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.40E-02
Cm-244	3.24E-05
Np-237	1.87E-09
Pu-238	3.80E-03
Pu-239	3.22E-02
Pu-240	9.59E-03
Pu-241	2.83E-01
Pu-242	2.05E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D035, D040, F001, F002, F005

TRUCON Code(s)

125/225

Waste Stream Description

This waste stream is composed primarily of objects which, because of physical size, cannot be packaged in a 55-gallon drum. Typical objects include decommissioned gloveboxes, hoods, and large pieces of equipment (lathes, mills, etc.). This waste stream may contain lead metal (e.g., bricks, foil), Kaufman cans (lead seams), lead-lined and cadmium-lined steel cans, mercury batteries, fluorescent and incandescent light bulbs. The void space in boxes may be filled with other TRU waste items or with foam in plastic bags.

Waste Stream ID: LL-W018b

Appendix A

TRU Waste Inventory Profile Report

Site	Lawrence Livermore National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Sealed Sources	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	3.5	0.0	3.5
55-gal POC - 12" w/o Liner	0.0	4.2	4.2
Current Form Total	3.5	4.2	7.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal POC - 12" w/ Liner	3.5	4.2	7.7
Final Form Total	3.5	4.2	7.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	7.10
Aluminum-based Metals/Alloys	1.52
Other Metals	4.31
Other Inorganic Materials	3.78
Cellulosics	1.54
Rubber	0.00
Plastics	0.10
Cements	0.00
Inorganic Matrix	9.29
Organic Matrix	4.91
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	527.40
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	137.50
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.82E+00
Am-243	2.94E-06
Cm-244	2.57E-04
Cs-137	4.52E-03
Np-237	1.71E-06
Pu-238	3.71E+00
Pu-239	1.67E-01
Pu-240	2.01E-08
Pu-241	5.16E-02
Sr-90	1.41E-02
U-235	1.21E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s)
117/217

Waste Stream Description

Specific waste items in this waste stream include sealed sources composed primarily of metal or metal encapsulated in a plastic or resin disk. Other waste items consist of packaging including cans, ice cream cartons, and plastic bags, sheet, and tape, bentonite clay or other inorganic absorbents such as Floor Dr

Waste Stream ID: LL-W019

Appendix A

TRU Waste Inventory Profile Report

Site	Lawrence Livermore National Laboratory	Final Waste Form	Solidified Organics	Waste Matrix Code	S3900	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Solidified Waste (Form 2)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	15.8	0.0	15.8
Current Form Total	15.8	0.0	15.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	15.8	0.0	15.8
Final Form Total	15.8	0.0	15.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	31.26
Aluminum-based Metals/Alloys	74.49
Other Metals	3.39
Other Inorganic Materials	10.33
Cellulosics	4.12
Rubber	6.41
Plastics	38.49
Cements	0.00
Inorganic Matrix	87.35
Organic Matrix	66.83
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.07E+00
Am-243	1.60E-07
Cm-244	8.27E-04
Cs-137	2.15E-06
Np-237	1.06E-04
Pu-238	1.65E+00
Pu-239	5.19E+00
Pu-240	1.45E+00
Pu-241	2.03E+01
Pu-242	2.56E-04
Sr-90	2.15E-06
U-233	6.64E-02
U-234	1.25E-05
U-235	4.61E-05
U-238	1.31E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D035, D040, F001, F002, F005

TRUCON Code(s)

113/213

Waste Stream Description

This waste stream consists of drums with 50 percent or greater by volume solidified aqueous or organic liquids. Additional waste in each container includes glovebox trash.

Waste Stream ID: MC-W001

Appendix A

TRU Waste Inventory Profile Report

Site	U.S. Army Materiel Command	Final Waste Form	Heterogeneous	Waste Matrix Code	S5110	Handling	CH
Source Cat.	Discarding Excess/Expired Materials	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	USAMC TRU Waste				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
30-gal Drum	0.1	0.0	0.1
Current Form Total	0.1	0.0	0.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal S300 POC - 12" w/ Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	190.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	527.40
Packaging Material, Plastic	226.90
Packaging Material, Cellulosics	137.50
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Np-237	1.90E-04
Pu-239	2.43E-02
Th-229	3.03E-11
U-233	2.31E-08
U-235	6.71E-10

No Hazardous Waste Numbers Provided

TRUCON Code(s) 120/220

Waste Stream Description

Army sealed sources

Waste Stream ID: **NT-JAS-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Combined metal scrap and incidental combustibles			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	24.6	340.2	364.8
Current Form Total	24.6	340.2	364.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	24.6	340.2	364.8
Final Form Total	24.6	340.2	364.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	20.00
Aluminum-based Metals/Alloys	3.00
Other Metals	1.00
Other Inorganic Materials	1.00
Cellulosics	1.00
Rubber	1.00
Plastics	1.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.48E-01
Np-237	1.84E-07
Pu-238	6.80E-02
Pu-239	9.92E-02
Pu-240	8.02E-02
Pu-241	2.02E+00
Th-229	1.91E-16
Th-230	1.42E-11
Th-232	9.39E-19
U-233	1.54E-12
U-234	7.84E-07
U-235	3.91E-10
U-236	9.51E-09

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

Waste stream consists of spent Primary Target Chambers from Jasper gas gun experiments. PTCs are metal chambers used to contain debris from the impact of a sabot on a disk of plutonium metal.

Waste Stream ID: **NTLBL-S5400-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-NTLBL-S5400	1.2
55-gal Drum Dir Ld w/o Liner	WP-NTLBL-S5400	0.4
Shipped Total		1.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	68.85
Aluminum-based Metals/Alloys	0.00
Other Metals	19.04
Other Inorganic Materials	35.81
Cellulosics	8.37
Rubber	4.61
Plastics	18.87
Cements	0.00
Inorganic Matrix	1.74
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.31E-01
Am-243	3.49E-03
Cm-244	5.39E-01
Cs-137	3.11E-05
Np-237	4.06E-04
Pu-238	8.79E-02
Pu-239	4.04E-01
Pu-240	9.16E-02
Pu-241	2.02E+00
Pu-242	1.27E-05
Sr-90	3.11E-05
Th-229	3.32E-13
Th-230	4.53E-12
Th-232	2.68E-19
U-233	3.54E-09
U-234	5.03E-07
U-235	7.97E-10
U-236	5.43E-09
U-238	3.84E-15

Haz. Waste No(s).

D004, D005, D006,
D007, D008, D009,
D010, D011, D022,
D028, F001, F002,
F003, F005

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: NTLRC-S5400-S

Appendix A

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-NTLRC-S5400	3.1
Shipped Total		3.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	48.02
Aluminum-based Metals/Alloys	10.80
Other Metals	9.85
Other Inorganic Materials	18.63
Cellulosics	26.85
Rubber	31.38
Plastics	73.04
Cements	0.00
Inorganic Matrix	9.45
Organic Matrix	0.57
Soils/gravel	0.17
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.54E+00
Am-243	1.13E-05
Cs-137	3.59E-07
Np-237	7.88E-05
Pu-238	1.84E-01
Pu-239	2.31E+00
Pu-240	8.47E-01
Pu-241	1.07E+01
Pu-242	9.39E-05
Sr-90	3.59E-07
Th-229	6.39E-14
Th-230	2.56E-08
Th-232	2.48E-18
U-233	6.83E-10
U-234	1.42E-03
U-235	4.74E-05
U-236	5.02E-08
U-238	3.37E-05

Haz. Waste No(s).

D005, D008, D009, D011, D019, D035, D040, F001, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: NT-RF-BERYLLIUM-S

Appendix A

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5111	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-NT-RF-BERYLLIUM	29.3
Shipped Total		29.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	3.88
Aluminum-based Metals/Alloys	4.01
Other Metals	158.30
Other Inorganic Materials	1.17
Cellulosics	8.92
Rubber	0.09
Plastics	15.77
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.31E-01
Am-243	3.13E-08
Np-237	1.39E-06
Pu-238	3.24E-02
Pu-239	8.28E-01
Pu-240	1.88E-01
Pu-241	1.46E+00
Pu-242	1.47E-05
Th-229	3.80E-08
Th-230	5.55E-10
Th-232	5.51E-19
U-233	2.03E-04
U-234	3.09E-05
U-235	6.11E-07
U-236	1.12E-08
U-238	7.89E-06

Haz. Waste No(s).

D007, F002

No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: NT-RF-GRAPHITE-S

Appendix A

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5126	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-NT-RF-GRAPHITE	3.7
Shipped Total		3.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.32
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	291.08
Cellulosics	2.30
Rubber	0.61
Plastics	12.55
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.99E-01
Np-237	8.65E-06
Pu-238	3.20E-01
Pu-239	1.04E+01
Pu-240	1.92E+00
Pu-241	1.72E+01
Pu-242	1.40E-04
Th-229	6.76E-15
Th-230	2.89E-10
Th-232	5.64E-18
U-233	7.29E-11
U-234	1.70E-05
U-235	2.04E-08
U-236	1.14E-07
U-238	7.58E-06

Haz. Waste No(s).

D008

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: NT-RF-METAL-S

Appendix A

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5111	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-NT-RF-METAL	5.6
55-gal Drum Dir Ld w/o Liner	WP-NT-RF-METAL	0.4
Shipped Total		6.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	166.64
Aluminum-based Metals/Alloys	25.59
Other Metals	4.59
Other Inorganic Materials	0.24
Cellulosics	7.26
Rubber	0.65
Plastics	21.28
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.16E-01
Am-243	4.51E-07
Np-237	1.90E-06
Pu-238	3.54E-02
Pu-239	1.12E+00
Pu-240	2.77E-01
Pu-241	2.52E+00
Pu-242	2.24E-05
Th-229	1.51E-15
Th-230	1.33E-07
Th-232	8.11E-19
U-233	1.63E-11
U-234	7.39E-03
U-235	4.54E-06
U-236	1.64E-08
U-238	3.70E-03

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: NTS54332R0-S

Appendix A

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-NTS54332R0	235.0
55-gal Drum Dir Ld w/o Liner	WP-NTS54332R0	47.6
SWB w/ 4 - 55-gal Drums w/ Liners	WP-NTS54332R0	24.6
Shipped Total		307.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	45.13
Aluminum-based Metals/Alloys	2.90
Other Metals	3.84
Other Inorganic Materials	6.28
Cellulosics	13.22
Rubber	11.05
Plastics	46.10
Cements	0.00
Inorganic Matrix	10.47
Organic Matrix	3.40
Soils/gravel	0.08
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.95E-01
Am-243	4.23E-05
Cm-244	9.57E-03
Cs-137	7.74E-07
Np-237	4.65E-05
Pu-238	8.15E-02
Pu-239	1.20E+00
Pu-240	3.14E-01
Pu-241	3.45E+00
Pu-242	3.38E-05
Sr-90	7.89E-07
Th-229	1.99E-07
Th-230	2.45E-09
Th-232	2.07E-18
U-233	7.08E-04
U-234	9.10E-05
U-235	3.25E-03
U-236	2.80E-08
U-238	3.29E-05

Haz. Waste No(s).

D004, D005, D006,
D007, D008, D009,
D010, D011, D019,
D022, D027, D028,
D029, D040, F001,
F002, F003, F004,
F005

No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: NTS54COMR0-S

Appendix A

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-NTS54COMR0	39.5
55-gal Drum Dir Ld w/o Liner	WP-NTS54COMR0	8.9
SWB w/ 4 - 55-gal Drums w/ Liners	WP-NTS54COMR0	1.9
Shipped Total		50.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	50.86
Aluminum-based Metals/Alloys	4.45
Other Metals	5.66
Other Inorganic Materials	8.36
Cellulosics	20.52
Rubber	12.84
Plastics	55.40
Cements	0.00
Inorganic Matrix	3.71
Organic Matrix	0.66
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.80E-01
Am-243	4.16E-04
Cm-244	4.91E-01
Cs-137	1.64E-06
Np-237	9.68E-05
Pu-238	4.25E-01
Pu-239	1.02E+00
Pu-240	2.42E-01
Pu-241	2.39E+00
Pu-242	3.66E-05
Sr-90	1.64E-06
Th-229	1.46E-06
Th-230	1.14E-09
Th-232	1.60E-18
U-233	5.19E-03
U-234	4.39E-05
U-235	2.63E-07
U-236	2.16E-08
U-238	1.75E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D040, F001, F002, F003, F004, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: NTS54MIX1R0-S

Appendix A

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-NTS54MIX1R0	0.4
Shipped Total		0.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	33.89
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	2.40
Cellulosics	38.46
Rubber	41.59
Plastics	38.46
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.21E-03
Am-243	2.30E-04
Cs-137	1.77E-04
Np-237	1.90E-06
Pu-238	9.68E-04
Pu-239	6.96E-02
Pu-240	1.67E-02
Pu-241	5.43E-02
Pu-242	1.64E-06
Th-229	9.47E-15
Th-230	3.17E-13
Th-232	3.06E-19
U-233	4.05E-11
U-234	1.40E-08
U-235	3.43E-10
U-236	2.48E-09
U-238	1.24E-15

Haz. Waste No(s).

D004, D005, D006,
D007, D008, D009,
D010, D011, D019,
D022, D027, D028,
D029, D040, F001,
F002, F003, F004,
F005

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: NT-W001

Appendix A

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Heterogeneous Debris, Uncategorized			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	5.6	0.0	5.6
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	1.0	0.0	1.0
Box - Misc	229.3	0.0	229.3
Current Form Total	235.9	0.0	235.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	5.6	0.0	5.6
SWB Dir Ld w/ Liner	105.8	0.0	105.8
Final Form Total	111.5	0.0	111.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	72.20
Aluminum-based Metals/Alloys	12.30
Other Metals	5.80
Other Inorganic Materials	4.80
Cellulosics	52.50
Rubber	3.80
Plastics	50.10
Cements	30.00
Inorganic Matrix	11.80
Organic Matrix	11.80
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	152.36
Packaging Material, Plastic	3.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.87E-01
Am-243	1.99E-03
Cm-244	3.04E-03
Cs-137	4.02E-05
Np-237	1.12E-05
Pu-238	2.04E-01
Pu-239	4.53E+00
Pu-240	3.04E-02
Pu-241	2.04E-01
Pu-242	1.42E-04
Pu-244	1.63E-09
Sr-90	1.36E-07
Th-229	5.77E-06
Th-230	2.82E-09
Th-232	9.82E-18
U-233	2.93E-03
U-234	2.14E-05
U-235	2.64E-07
U-236	1.89E-08
U-238	2.51E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D040, F001, F002, F003, F004, F005

TRUCON Code(s)

111/211, 116/216, 125/225

Waste Stream Description

This waste stream consists of glovebox parts, laboratory trash, contaminated equipment. The waste is contact-handled TRU waste. The waste stream was generated at the Lawrence Livermore National Laboratory, Livermore, CA (LLNL) and shipped to the NTS from 1974 until 1990. The waste was declared as potentially mixed TRU waste by the generator in April, 1991. There are currently 30 drums of heterogeneous debris that have been identified via RTR and 49 boxes.

Waste Stream ID: NT-W002

Appendix A

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3900	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Solidified Solids	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
110-gal Drum w/ 1 - 85-gal Drum	0.4	0.0	0.4
55-gal Drum Dir Ld w/ Liner	13.7	0.0	13.7
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.6	0.0	0.6
Current Form Total	14.8	0.0	14.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	11.2	0.0	11.2
SWB w/ 4 - 55-gal Drums w/o Liners	7.6	0.0	7.6
Final Form Total	18.8	0.0	18.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	72.20
Aluminum-based Metals/Alloys	12.30
Other Metals	5.80
Other Inorganic Materials	4.80
Cellulosics	52.50
Rubber	3.80
Plastics	50.10
Cements	30.00
Inorganic Matrix	11.80
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	163.10
Packaging Material, Plastic	22.11
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.87E-01
Am-243	1.99E-03
Cm-244	3.04E-03
Cs-137	4.02E-05
Np-237	1.12E-05
Pu-238	2.04E-01
Pu-239	4.53E+00
Pu-240	3.04E-02
Pu-241	2.04E-01
Pu-242	1.42E-04
Pu-244	1.63E-09
Sr-90	1.36E-07
Th-229	5.77E-06
Th-230	2.82E-09
Th-232	9.82E-18
U-233	2.93E-03
U-234	2.14E-05
U-235	2.64E-07
U-236	1.89E-08
U-238	2.51E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D040, F001, F002, F003, F004, F005

TRUCON Code(s)

111/211

Waste Stream Description

This waste stream consists of solidified sludge, some laboratory trash, contaminated equipment. Real time Radiography has been performed to show no free liquids, with the exception of less than 1% by volume in the solidified sludge. The waste is contact-handled TRU waste. The waste stream was generated at the Lawrence Livermore National Laboratory, Livermore, CA (LLNL) and shipped to the NTS from 1974 until 1990. The waste was declared as potentially mixed TRU waste by the generator in April, 1991. There are currently 69 drums of solidified (portland or gypsum (envirostone) cement) inorganic sludge that have been identified via RTR.

Waste Stream ID: NT-W003

Appendix A

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Heterogeneous Debris, Uncategorized			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	69.50
Aluminum-based Metals/Alloys	0.00
Other Metals	4.20
Other Inorganic Materials	0.00
Cellulosics	30.00
Rubber	0.00
Plastics	50.10
Cements	0.00
Inorganic Matrix	11.50
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.50E-01
Cs-137	2.61E-05
Np-237	9.51E-06
Pu-238	8.97E-02
Pu-239	1.79E+00
Pu-240	4.40E-01
Pu-241	4.62E+00
Pu-242	6.07E-05
Th-229	5.76E-13
Th-230	5.64E-10
Th-232	1.42E-16
U-233	6.53E-10
U-234	5.82E-06
U-235	8.07E-05
U-236	2.74E-07
U-238	2.45E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)
116/216, 125/225

Waste Stream Description

This waste stream consists of laboratory trash, used sources, and debris waste. Real time radiography has been performed on the waste to verify that there are no free liquids present. The waste is contact-handled TRU waste. The waste stream was generated at the EG&G North Las Vegas and shipped to the test site around late 1970's to early 1980's. There are currently 3 drums of this waste.

Waste Stream ID: NT-W004

Appendix A

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Heterogeneous Debris, Uncategorized			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	192.30
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	24.00
Cellulosics	14.40
Rubber	0.00
Plastics	14.50
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	1.62E+00
Pu-239	1.33E-01
Th-230	1.02E-08
U-234	1.05E-04
U-235	2.76E-09

No Hazardous Waste Numbers Provided

TRUCON Code(s)
116/216, 125/225

Waste Stream Description

ITRI waste

Waste Stream ID: NT-W005

Appendix A

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Heterogeneous Debris, Uncategorized			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	4.81
Aluminum-based Metals/Alloys	0.00
Other Metals	0.96
Other Inorganic Materials	23.56
Cellulosics	5.29
Rubber	11.54
Plastics	28.85
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.49E-02
Cs-137	1.05E-06
Np-237	9.65E-07
Pu-238	1.21E-02
Pu-239	2.42E-01
Pu-240	5.95E-02
Pu-241	6.26E-01
Pu-242	8.20E-06
Th-229	6.41E-14
Th-230	7.61E-11
Th-232	1.92E-17
U-233	7.04E-11
U-234	7.84E-07
U-235	5.02E-09
U-236	3.71E-08
U-238	8.70E-06

No Hazardous Waste Numbers Provided

TRUCON Code(s)
116/216, 125/225

Waste Stream Description

This waste stream consists of laboratory trash, and debris waste. Real time radiography has been performed on the waste to verify that there are no free liquids present. The waste is contact-handled TRU waste. The waste stream was generated at the Tonopah Test Range facility and shipped to the test site around late 1970's. There is currently 1 drums of this waste.

Waste Stream ID: NT-W021

Appendix A

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	V3XA Spheres	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Sphere - 3-ft. dia HY80 Carbon Steel	0.9	0.0	0.9
Current Form Total	0.9	0.0	0.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
TDOP Dir Ld	9.0	0.0	9.0
Final Form Total	9.0	0.0	9.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	3140.00
Aluminum-based Metals/Alloys	6.60
Other Metals	10.30
Other Inorganic Materials	0.00
Cellulosics	10.10
Rubber	0.00
Plastics	0.00
Cements	15.00
Inorganic Matrix	548.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	171.30
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.65E-01
Np-237	2.66E-06
Pu-238	1.63E-01
Pu-239	5.68E+00
Pu-240	1.30E+00
Pu-241	1.16E+01
Pu-242	1.15E-04
Th-229	4.51E-14
Th-230	5.94E-07
Th-232	4.21E-16
U-233	8.74E-11
U-234	3.15E-03
U-235	6.02E-05
U-236	8.11E-07
U-238	3.10E-03

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

The two steel vessels are 1-inch thick by 3-foot diameter, weighing about 2700 lbs. each. The vessels contain heterogeneous mixtures of the following materials: Plutonium, D-38, Beryllium metal, Completely burned high explosive, Stainless steel, Brass, Polystyrene foam, Aluminum, Coke (degassed coal), Water absorbed by the coke, Steel, Glass, Epoxy resin, Thermalite (aerated cement block), Plaster, Hortag (fly-ash and clay), Wood, and Krypton-85 tracer gas for leak detection. The UK has had similar vessels in storage for over ten years, but none containing plutonium have ever been opened. Vessels containing D-38 only have been opened, with small amounts of water vapor and some loose debris found inside. The bulk of the materials were found to be trapped within the thick coke layer lining the inner surface of the vessel. No more wastes of this type are planned to be generated.

Waste Stream ID: **OR-CHEM-CH-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Analytical Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	ORNL Analytical Chemistry CH-TRU Debris Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
110-gal Drum Dir Ld	0.4	0.0	0.4
55-gal Drum Dir Ld w/o Liner	18.9	0.0	18.9
79-gal Drum Dir Ld	1.2	0.0	1.2
Box - Misc	31.5	0.0	31.5
Current Form Total	52.0	0.0	52.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	26.0	0.0	26.0
Final Form Total	26.0	0.0	26.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	96.20
Aluminum-based Metals/Alloys	0.80
Other Metals	10.65
Other Inorganic Materials	2.40
Cellulosics	80.90
Rubber	7.40
Plastics	64.90
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	1.50
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.88E-01
Am-243	4.00E-05
Cm-244	4.05E-03
Cs-137	9.27E-03
Np-237	2.72E-06
Pu-238	4.07E+00
Pu-239	1.21E-01
Pu-240	2.25E-02
Pu-241	1.54E-01
Pu-242	3.12E-05
Pu-244	4.27E-21
Sr-90	7.63E-03
Th-229	4.85E-05
Th-230	3.69E-08
Th-232	2.72E-06
U-233	2.35E-02
U-234	3.21E-04
U-235	2.51E-06
U-236	3.40E-08
U-238	4.03E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, F001, F002, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from analytical chemistry operations at ORNL

Waste Stream ID: **OR-GENR-CH-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	ORNL General Research & Development CH-TRU Debris Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
110-gal Drum Dir Ld	1.2	0.0	1.2
55-gal Drum Dir Ld w/o Liner	18.9	0.0	18.9
79-gal Drum Dir Ld	13.8	0.0	13.8
85-gal Drum Dir Ld w/ Liner	0.3	0.0	0.3
Box - Misc	17.3	0.0	17.3
Current Form Total	51.6	0.0	51.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	26.0	0.0	26.0
Final Form Total	26.0	0.0	26.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	96.20
Aluminum-based Metals/Alloys	0.80
Other Metals	10.65
Other Inorganic Materials	2.40
Cellulosics	80.90
Rubber	7.40
Plastics	64.90
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	1.50
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.69E-02
Am-243	1.82E-02
Cm-244	2.32E-01
Cs-137	5.96E-08
Np-237	5.31E-04
Pu-238	3.47E-01
Pu-239	9.92E-02
Pu-240	1.02E-03
Pu-241	7.64E-05
Pu-242	4.33E-03
Pu-244	3.46E-11
Sr-90	3.05E-07
Th-229	4.86E-06
Th-230	1.08E-05
Th-232	6.97E-08
U-233	2.34E-03
U-234	3.23E-05
U-235	1.78E-07
U-236	1.33E-06
U-238	2.08E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, F001, F002, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from general R&D at ORNL

Waste Stream ID: **OR-ISTP-CH-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	ORNL Isotopes Facilities CH-TRU Debris Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
110-gal Drum Dir Ld	2.9	0.0	2.9
55-gal Drum Dir Ld w/o Liner	68.4	0.0	68.4
79-gal Drum Dir Ld	49.3	0.0	49.3
85-gal Drum Dir Ld w/ Liner	1.3	0.0	1.3
Box - Misc	15.3	0.0	15.3
Current Form Total	137.3	0.0	137.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	69.1	0.0	69.1
Final Form Total	69.1	0.0	69.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	96.20
Aluminum-based Metals/Alloys	0.80
Other Metals	10.65
Other Inorganic Materials	2.40
Cellulosics	80.90
Rubber	7.40
Plastics	64.90
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	1.50
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.60E+00
Am-243	1.37E-02
Cm-244	9.10E+00
Cs-137	3.49E-04
Np-237	4.35E-03
Pu-238	1.30E+01
Pu-239	1.78E-01
Pu-240	2.53E-01
Pu-241	3.68E+00
Pu-242	1.30E-03
Pu-244	1.23E-10
Sr-90	3.96E-07
Th-229	5.35E-06
Th-230	7.49E-06
Th-232	2.12E-06
U-233	2.58E-03
U-234	8.90E-04
U-235	2.80E-06
U-236	1.99E-07
U-238	3.40E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, F001, F002, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from isotopes production at ORNL

Waste Stream ID: **OR-NBL-CH-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	New Brunswick Laboratory CH-TRU Debris Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	7.5	0.0	7.5
79-gal Drum Dir Ld	15.0	0.0	15.0
85-gal Drum Dir Ld w/ Liner	0.3	0.0	0.3
Current Form Total	22.8	0.0	22.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	11.4	0.0	11.4
Final Form Total	11.4	0.0	11.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	96.20
Aluminum-based Metals/Alloys	0.80
Other Metals	10.65
Other Inorganic Materials	2.40
Cellulosics	80.90
Rubber	7.40
Plastics	64.90
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	1.50
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.89E-06
Np-237	1.98E-11
Pu-238	6.28E-02
Pu-239	9.49E-02
Pu-240	3.75E-02
Pu-241	6.23E-06
Th-229	2.60E-06
Th-230	2.08E-08
Th-232	1.33E-17
U-233	1.26E-03
U-234	1.07E-04
U-235	1.41E-05
U-236	2.45E-08
U-238	8.75E-05

Haz. Waste No(s).

D008, D009

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from NBL

Waste Stream ID: **OR-NFS-CH-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Nuclear Fuel Services CH-TRU Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	93.4	0.0	93.4
Box - Misc	23.4	0.0	23.4
Current Form Total	116.8	0.0	116.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	58.9	0.0	58.9
Final Form Total	58.9	0.0	58.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	96.20
Aluminum-based Metals/Alloys	0.80
Other Metals	10.65
Other Inorganic Materials	2.40
Cellulosics	80.90
Rubber	7.40
Plastics	64.90
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	1.50
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.26E-01
Am-243	4.63E-05
Cm-244	8.61E-02
Cs-137	5.32E-04
Np-237	5.31E-06
Pu-238	1.74E-01
Pu-239	1.48E+00
Pu-240	8.20E-01
Pu-241	4.75E+00
Pu-242	3.78E-04
Pu-244	9.23E-14
Sr-90	3.85E-03
Th-229	4.45E-06
Th-230	8.90E-06
Th-232	1.12E-06
U-233	2.13E-03
U-234	4.50E-02
U-235	3.27E-06
U-236	5.36E-07
U-238	5.25E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

Waste consists of non-mixed CH-TRU debris from NFS

Waste Stream ID: **OR-NFS-CH-HOM**

Appendix A

TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3000	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Nuclear Fuel Services CH-TRU Homogeneous Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	10.0	0.0	10.0
Current Form Total	10.0	0.0	10.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	10.0	0.0	10.0
Final Form Total	10.0	0.0	10.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	319.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	100.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.04E+01
Np-237	6.25E-05
Pu-238	2.93E+00
Pu-239	1.59E+01
Pu-240	8.57E+00
Pu-241	7.02E+01
Pu-242	1.04E-03
Th-229	1.81E-12
Th-230	9.01E-05
Th-232	3.04E-15
U-233	2.75E-09
U-234	4.56E-01
U-235	1.86E-05
U-236	5.59E-06
U-238	5.03E-04

Haz. Waste No(s).

D006, D009

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of non-mixed homogeneous waste from NFS

Waste Stream ID: **OR-NFS-CH-SOIL**

Appendix A

TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Soils	Waste Matrix Code	S4200	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Nuclear Fuel Services CH-TRU Soil Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	110.0	0.0	110.0
Box - Misc	12.7	0.0	12.7
Current Form Total	122.8	0.0	122.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	123.8	0.0	123.8
Final Form Total	123.8	0.0	123.8

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.24E+00
Np-237	8.03E-06
Pu-238	2.07E-01
Pu-239	2.72E+00
Pu-240	1.20E+00
Pu-241	5.12E+00
Pu-242	9.26E-05
Th-229	1.61E-07
Th-230	1.08E-05
Th-232	6.74E-08
U-233	7.79E-05
U-234	5.47E-02
U-235	4.52E-06
U-236	7.83E-07
U-238	5.65E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

Waste consists of non-mixed soils from NFS

Waste Stream ID: **OR-PGDP-CH-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Paducah Gaseous Diffusion Plant CH-TRU Debris Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	96.20
Aluminum-based Metals/Alloys	0.80
Other Metals	10.65
Other Inorganic Materials	2.40
Cellulosics	80.90
Rubber	7.40
Plastics	64.90
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	1.50
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Np-237	2.35E-02
Pu-239	7.59E-02
Th-229	2.31E-09
Th-230	5.58E-07
U-233	2.24E-06
U-234	2.82E-03
U-235	1.13E-04
U-238	2.80E-03

Haz. Waste No(s).

D008

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from PGDP

Waste Stream ID: **OR-RADP-CH-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	ORNL Radiochemical Processing Research & Development CH-TRU Debris Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
110-gal Drum Dir Ld	0.4	0.0	0.4
55-gal Drum Dir Ld w/o Liner	43.5	0.0	43.5
79-gal Drum Dir Ld	14.7	0.0	14.7
Box - Misc	32.5	0.0	32.5
Current Form Total	91.0	0.0	91.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	45.8	0.0	45.8
Final Form Total	45.8	0.0	45.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	96.20
Aluminum-based Metals/Alloys	0.80
Other Metals	10.65
Other Inorganic Materials	2.40
Cellulosics	80.90
Rubber	7.40
Plastics	64.90
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	1.50
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.05E-01
Am-243	1.40E-03
Cm-244	1.81E+00
Cs-137	2.20E-05
Np-237	8.70E-05
Pu-238	3.43E-02
Pu-239	2.35E-01
Pu-240	5.02E-02
Pu-241	2.69E-01
Pu-242	3.03E-06
Pu-244	1.94E-10
Sr-90	2.21E-05
Th-229	9.74E-07
Th-230	7.34E-10
Th-232	1.27E-08
U-233	4.32E-04
U-234	4.85E-06
U-235	3.05E-06
U-236	3.09E-08
U-238	9.12E-08

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, F001, F002, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from radiochemical processing R&D at ORNL

Waste Stream ID: **OR-REDC-CH-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Radiochemical Engineering Development Center CH-TRU Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
110-gal Drum Dir Ld	0.4	0.0	0.4
55-gal Drum Dir Ld w/o Liner	176.2	62.4	238.6
79-gal Drum Dir Ld	8.1	0.0	8.1
85-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Box - Misc	77.3	0.0	77.3
Current Form Total	262.6	62.4	325.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	132.1	62.4	194.5
Final Form Total	132.1	62.4	194.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	96.20
Aluminum-based Metals/Alloys	0.80
Other Metals	10.65
Other Inorganic Materials	2.40
Cellulosics	80.90
Rubber	7.40
Plastics	64.90
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	1.50
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.51E-02
Am-243	1.38E-03
Cm-244	1.86E-01
Cs-137	6.10E-03
Np-237	2.82E-05
Pu-238	2.88E-02
Pu-239	2.62E-02
Pu-240	1.39E-02
Pu-241	1.34E-01
Pu-242	4.09E-05
Pu-244	1.90E-11
Sr-90	4.22E-02
Th-229	1.67E-06
Th-230	7.20E-10
Th-232	2.53E-08
U-233	3.06E-06
U-234	4.59E-06
U-235	1.52E-08
U-236	4.77E-04
U-238	3.71E-09

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, F001, F002, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from REDC at ORNL

Waste Stream ID: **OR-REDC-RH-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Radiochemical Engineering Development Center RH-TRU Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Cask - Misc	11.2	0.0	437.8
Current Form Total	403.0	34.9	437.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid - Dir Ld	287.5	49.8	337.3
Final Form Total	287.5	49.8	337.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	96.20
Aluminum-based Metals/Alloys	0.80
Other Metals	10.65
Other Inorganic Materials	2.40
Cellulosics	80.90
Rubber	7.40
Plastics	64.90
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	1.50
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	560.60
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.59E-03
Am-243	1.34E-04
Cm-244	2.25E-01
Cs-137	6.59E-03
Np-237	1.77E-08
Pu-238	1.20E-03
Pu-239	8.15E-04
Pu-240	1.33E-03
Pu-241	5.87E-03
Pu-242	1.27E-05
Pu-244	7.92E-13
Sr-90	3.19E-02
Th-229	5.63E-16
Th-230	8.32E-12
Th-232	3.00E-19
U-233	8.28E-13
U-234	8.17E-08
U-235	1.77E-11
U-236	6.40E-10
U-238	4.22E-14

Haz. Waste No(s).

D008, D009

TRUCON Code(s)

317

Waste Stream Description

Waste consists of RH-TRU debris from REDC at ORNL

Waste Stream ID: **OR-RF-CH-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	ORNL Reactor Fuels Research & Development CH-TRU Debris Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
110-gal Drum Dir Ld	0.4	0.0	0.4
55-gal Drum Dir Ld w/o Liner	122.5	0.0	122.5
79-gal Drum Dir Ld	18.8	0.0	18.8
85-gal Drum Dir Ld w/ Liner	1.3	0.0	1.3
Box - Misc	117.3	0.0	117.3
Current Form Total	260.4	0.0	260.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	130.8	0.0	130.8
Final Form Total	130.8	0.0	130.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	96.20
Aluminum-based Metals/Alloys	0.80
Other Metals	10.65
Other Inorganic Materials	2.40
Cellulosics	80.90
Rubber	7.40
Plastics	64.90
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	1.50
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.54E-02
Am-243	7.83E-05
Cm-244	1.22E-03
Cs-137	1.14E-03
Np-237	9.01E-07
Pu-238	3.11E-02
Pu-239	3.23E-01
Pu-240	7.51E-02
Pu-241	2.34E-01
Pu-242	2.75E-04
Pu-244	2.38E-19
Sr-90	8.58E-04
Th-229	8.81E-04
Th-230	1.73E-07
Th-232	2.88E-06
U-233	3.17E-01
U-234	2.69E-05
U-235	8.29E-06
U-236	4.91E-08
U-238	2.04E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D022, F001, F002, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from reactor fuels R&D at ORNL

Waste Stream ID: **OR-RF-CH-HOM**

Appendix A

TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	ORNL Reactor Fuels Research & Development CH-TRU Homogeneous Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	2.5	0.0	2.5
Current Form Total	2.5	0.0	2.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	2.5	0.0	2.5
Final Form Total	2.5	0.0	2.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	319.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	100.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.91E-02
Cs-137	1.11E-03
Np-237	1.39E-07
Pu-238	6.84E-03
Pu-239	1.68E-02
Pu-240	1.65E-02
Sr-90	1.13E-02
Th-229	4.58E-15
Th-230	4.02E-09
Th-232	5.87E-18
U-233	6.65E-12
U-234	2.06E-05
U-235	9.22E-07
U-236	1.08E-08
U-238	3.28E-05

Haz. Waste No(s).

D006, D007, D008,
D009, D010

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of homogeneous waste from reactor fuels R&D at ORNL

Waste Stream ID: **OR-TBD-CH-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	TBD CH-TRU Debris Waste	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
110-gal Drum Dir Ld	0.4	0.0	0.4
55-gal Drum Dir Ld w/o Liner	18.3	20.8	39.1
79-gal Drum Dir Ld	5.1	0.0	5.1
Box - Misc	69.4	0.0	69.4
Current Form Total	93.2	20.8	114.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	46.8	20.8	67.6
Final Form Total	46.8	20.8	67.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	96.20
Aluminum-based Metals/Alloys	0.80
Other Metals	10.65
Other Inorganic Materials	2.40
Cellulosics	80.90
Rubber	7.40
Plastics	64.90
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	1.50
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.42E+00
Am-243	1.71E-02
Cm-244	1.98E+00
Cs-137	5.11E-03
Np-237	4.81E-04
Pu-238	2.71E+00
Pu-239	5.16E-01
Pu-240	1.24E+00
Pu-241	5.65E-01
Pu-242	1.29E-04
Pu-244	3.21E-11
Sr-90	1.09E-04
Th-229	3.49E-05
Th-230	2.16E-07
Th-232	1.07E-06
U-233	1.65E-02
U-234	2.89E-04
U-235	9.76E-06
U-236	9.12E-07
U-238	1.86E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, F001, F002, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

CH-TRU Debris Waste Needing Further Evaluation

Waste Stream ID: **OR-TBD-RH-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	TBD RH-TRU Debris Waste	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	27.5	0.0	27.5
79-gal Drum Dir Ld	1.5	0.0	1.5
85-gal Drum Dir Ld w/ Liner	0.3	0.0	0.3
Cask - Misc	14.5	0.0	147.3
Current Form Total	155.0	21.6	176.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid - Dir Ld	110.4	32.0	142.4
Final Form Total	110.4	32.0	142.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	96.20
Aluminum-based Metals/Alloys	0.80
Other Metals	10.65
Other Inorganic Materials	2.40
Cellulosics	80.90
Rubber	7.40
Plastics	64.90
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	1.50
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	560.60
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.60E-01
Am-243	5.75E-03
Cm-244	1.86E+00
Cs-137	1.35E+01
Np-237	9.33E-05
Pu-238	7.39E-01
Pu-239	1.10E-01
Pu-240	8.98E-02
Pu-241	5.47E-01
Pu-242	2.09E-04
Pu-244	3.74E-11
Sr-90	8.32E+00
Th-229	2.61E-04
Th-230	7.34E-09
Th-232	7.33E-06
U-233	1.27E-01
U-234	6.16E-05
U-235	5.23E-06
U-236	4.97E-07
U-238	2.24E-06

Haz. Waste No(s).

D005, D006, D007,
D008, D009, D011

TRUCON Code(s)

317

Waste Stream Description

RH-TRU Debris Waste Needing Further Evaluation

Waste Stream ID: **OR-W203**

Appendix A

TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	ORNL Newly Generated Debris - Post 2013			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	0.0	49.9	49.9
Current Form Total	0.0	49.9	49.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	0.0	49.9	49.9
Final Form Total	0.0	49.9	49.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	96.20
Aluminum-based Metals/Alloys	0.80
Other Metals	10.65
Other Inorganic Materials	2.40
Cellulosics	80.90
Rubber	7.40
Plastics	64.90
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	1.50
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.03E-03
Am-243	6.44E-04
Cm-244	1.11E+00
Cs-137	3.36E-02
Pu-238	6.79E-03
Pu-239	1.24E-04
Pu-240	5.84E-03
Pu-241	8.10E-02
Pu-242	8.46E-05
Sr-90	2.49E-01

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

Hot Cell Debris Waste

Waste Stream ID: **OR-W213-CH-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Soils	Waste Matrix Code	S4200	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	ER CH TRU Heterogeneous Soils			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	0.0	56.4	56.4
Current Form Total	0.0	56.4	56.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	0.0	56.4	56.4
Final Form Total	0.0	56.4	56.4

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.43E-02
Am-243	1.06E-05
Cm-244	9.96E-05
Cs-137	3.56E-02
Np-237	3.54E-05
Pu-238	6.39E-03
Pu-239	1.69E-02
Pu-240	2.07E-05
Pu-241	7.63E-02
Pu-242	9.31E-06
Sr-90	2.66E-04
Th-229	2.50E-02
Th-230	4.17E-05
Th-232	4.01E-04
U-233	3.25E-02
U-234	1.84E-03
U-235	2.75E-05
U-236	2.92E-05
U-238	3.49E-04

No Hazardous Waste Numbers Provided

TRUCON Code(s)

111/211

Waste Stream Description

This waste is made up of soils.

Waste Stream ID: **OR-W213-RH-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Soils	Waste Matrix Code	S4200	Handling	RH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	ER RH TRU Heterogeneous Soils			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	0.0	44.9	44.9
Box - Misc	20.0	0.0	20.0
Current Form Total	20.0	44.9	64.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid - Dir Ld	28.5	26.7	55.2
Final Form Total	28.5	26.7	55.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	1300.00
Vitrified	0.00
Packaging Material, Steel	560.60
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.43E-02
Am-243	1.06E-05
Cm-244	9.96E-05
Cs-137	3.52E-01
Np-237	3.54E-05
Pu-238	6.39E-03
Pu-239	1.69E-02
Pu-240	2.07E-05
Pu-241	7.63E-02
Pu-242	9.31E-06
Sr-90	2.94E-03
Th-229	2.50E-02
Th-230	4.17E-05
Th-232	4.01E-04
U-233	3.25E-02
U-234	1.84E-03
U-235	2.75E-05
U-236	2.92E-05
U-238	3.49E-04

No Hazardous Waste Numbers Provided

TRUCON Code(s)
311

Waste Stream Description

This waste is made up of soils.

Waste Stream ID: **OR-WSTR-CH-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	ORNL-Liquid Waste Treatment CH-TRU Debris Waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	96.20
Aluminum-based Metals/Alloys	0.80
Other Metals	10.65
Other Inorganic Materials	2.40
Cellulosics	80.90
Rubber	7.40
Plastics	64.90
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	1.50
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	1.08E-01
Th-230	7.50E-10
U-234	7.37E-06

Haz. Waste No(s).

D008

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from ORNL liquids waste system.

Waste Stream ID: **OR-Y12-CH-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Oak Ridge Y-12 CH-TRU Debris Waste				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	0.6	0.0	0.6
79-gal Drum Dir Ld	0.6	0.0	0.6
Current Form Total	1.2	0.0	1.2

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	96.20
Aluminum-based Metals/Alloys	0.80
Other Metals	10.65
Other Inorganic Materials	2.40
Cellulosics	80.90
Rubber	7.40
Plastics	64.90
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	1.50
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Np-237	5.15E-03
Pu-238	1.81E-04
Pu-239	5.04E-02
Pu-240	1.05E-05
Th-229	5.07E-10
Th-230	8.83E-08
Th-232	3.74E-21
U-233	4.92E-07
U-234	4.46E-04
U-235	1.15E-04
U-236	6.89E-12
U-238	5.08E-04

Haz. Waste No(s).

D008

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from Y-12

Waste Stream ID: PA-A015

Appendix A

TRU Waste Inventory Profile Report

Site	Paducah Gaseous Diffusion Plant	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5129	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Transuranic - Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
110-gal Drum w/ 1 - 85-gal Drum w/ 1 55-gal Dru	0.8	0.0	0.8
30-gal Drum	0.1	0.0	0.1
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	1.9	0.0	1.9
Current Form Total	3.1	0.0	3.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.1	0.0	2.1
Final Form Total	2.1	0.0	2.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	96.00
Cements	0.00
Inorganic Matrix	1950.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.94E-02
Np-237	6.28E-02
Pu-238	1.39E-03
Pu-239	1.90E-01
Th-229	4.14E-09
Th-230	4.90E-03
U-233	4.90E-06
U-234	8.03E-03
U-235	4.02E-04
U-238	8.74E-03

Haz. Waste No(s).

D007, D008

TRUCON Code(s)

125/225

Waste Stream Description

Transuranic Debris

Waste Stream ID: PA-W014

Appendix A

TRU Waste Inventory Profile Report

Site	Paducah Gaseous Diffusion Plant	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3129	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Transuranic Waste Liquid/Solids			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
30-gal Drum	0.2	0.0	0.2
5-gal Drum	0.0	0.0	0.0
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	3.2	0.0	3.2
Current Form Total	3.5	0.0	3.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.9	0.0	2.9
Final Form Total	2.9	0.0	2.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	1950.00
Inorganic Matrix	575.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.55E-02
Cs-137	3.50E-03
Np-237	7.10E-01
Pu-239	5.50E-02
Th-229	4.17E-08
Th-230	3.75E-06
U-233	5.23E-05
U-234	2.45E-02
U-235	1.34E-03
U-238	3.76E-02

Haz. Waste No(s).

D007, D008

TRUCON Code(s)

114/214

Waste Stream Description

Transuranic Aqueous Liquids and Sludges

Waste Stream ID: **RF001.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Combustible	Waste Matrix Code	S5390	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF001.01	745.1
55-gal Drum Dir Ld w/o Liner	WP-RF001.01	92.4
SWB Dir Ld w/o Liner	WP-RF001.01	100.2
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF001.01	37.8
SWB w/ 4 - 55-gal Drums w/o Liners	WP-RF001.01	3.8
Shipped Total		979.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.08
Aluminum-based Metals/Alloys	0.01
Other Metals	0.24
Other Inorganic Materials	2.65
Cellulosics	27.92
Rubber	0.74
Plastics	78.05
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.02
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.53E+00
Am-243	1.21E-06
Np-237	5.61E-05
Pu-238	1.48E-01
Pu-239	3.44E+00
Pu-240	7.99E-01
Pu-241	1.12E+01
Pu-242	1.20E-04
Th-229	5.05E-08
Th-230	1.29E-08
Th-232	2.87E-17
U-233	7.70E-05
U-234	2.06E-04
U-235	9.79E-06
U-236	1.66E-07
U-238	2.26E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF002.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5111	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF002.01	399.4
55-gal Drum Dir Ld w/o Liner	WP-RF002.01	32.2
55-gal POC - 12" w/ Liner	WP-RF002.01	13.7
SWB Dir Ld w/o Liner	WP-RF002.01	984.7
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF002.01	17.0
TDOP w/ 1 SWB w/o Liners	WP-RF002.01	13.5
Shipped Total		1460.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	230.92
Aluminum-based Metals/Alloys	1.27
Other Metals	10.50
Other Inorganic Materials	0.49
Cellulosics	7.19
Rubber	0.20
Plastics	4.85
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.01
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.69E-01
Am-243	7.25E-07
Cs-137	2.13E-07
Np-237	8.25E-06
Pu-238	1.47E-01
Pu-239	3.02E+00
Pu-240	7.11E-01
Pu-241	1.22E+01
Pu-242	8.39E-05
Th-229	8.42E-09
Th-230	4.82E-09
Th-232	1.87E-17
U-233	1.50E-05
U-234	9.06E-05
U-235	4.81E-06
U-236	1.26E-07
U-238	1.94E-04

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF003.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5126	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF003.01	65.9
55-gal Drum Dir Ld w/o Liner	WP-RF003.01	0.4
55-gal POC - 12" w/ Liner	WP-RF003.01	275.8
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF003.01	9.5
SWB w/ 4 - 55-gal Drums w/o Liners	WP-RF003.01	3.8
Shipped Total		355.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	13.10
Aluminum-based Metals/Alloys	0.00
Other Metals	0.07
Other Inorganic Materials	70.17
Cellulosics	1.84
Rubber	0.00
Plastics	2.72
Cements	0.00
Inorganic Matrix	0.30
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.37E+00
Np-237	2.60E-05
Pu-238	1.46E+00
Pu-239	3.57E+01
Pu-240	8.63E+00
Pu-241	9.73E+01
Pu-242	8.25E-04
Th-229	1.86E-08
Th-230	3.62E-09
Th-232	3.10E-16
U-233	2.84E-05
U-234	7.24E-05
U-235	1.64E-06
U-236	1.79E-06
U-238	3.67E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF004.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5122	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF004.01	263.3
55-gal Drum Dir Ld w/o Liner	WP-RF004.01	7.9
55-gal POC - 12" w/ Liner	WP-RF004.01	2.3
SWB Dir Ld w/o Liner	WP-RF004.01	1.9
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF004.01	5.7
SWB w/ 4 - 55-gal Drums w/o Liners	WP-RF004.01	1.9
Shipped Total		283.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.60
Aluminum-based Metals/Alloys	0.02
Other Metals	0.46
Other Inorganic Materials	464.77
Cellulosics	11.91
Rubber	0.00
Plastics	4.75
Cements	0.00
Inorganic Matrix	0.04
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.36E-01
Am-243	3.12E-09
Np-237	5.36E-06
Pu-238	1.15E-01
Pu-239	2.43E+00
Pu-240	5.62E-01
Pu-241	1.06E+01
Pu-242	6.77E-05
Th-229	2.30E-14
Th-230	3.29E-09
Th-232	1.03E-17
U-233	1.02E-10
U-234	7.40E-05
U-235	2.35E-06
U-236	8.34E-08
U-238	2.66E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF005.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Salt Waste	Waste Matrix Code	S3141	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	WP-RF005.01	119.4
Shipped Total		119.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	19.04
Aluminum-based Metals/Alloys	0.00
Other Metals	3.07
Other Inorganic Materials	19.27
Cellulosics	0.00
Rubber	0.00
Plastics	1.73
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.43E+01
Np-237	1.51E-04
Pu-238	1.71E+00
Pu-239	4.01E+01
Pu-240	1.03E+01
Pu-241	6.45E+01
Pu-242	8.47E-04
Th-229	1.06E-12
Th-230	1.86E-09
Th-232	6.11E-16
U-233	3.35E-09
U-234	4.54E-05
U-235	1.04E-06
U-236	2.75E-06
U-238	1.15E-12

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF005.02-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Salt Waste	Waste Matrix Code	S3141	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	WP-RF005.02	78.4
Shipped Total		78.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	13.92
Aluminum-based Metals/Alloys	0.00
Other Metals	0.23
Other Inorganic Materials	27.49
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.23E+01
Np-237	2.43E-04
Pu-238	1.54E+00
Pu-239	3.70E+01
Pu-240	9.73E+00
Pu-241	5.41E+01
Pu-242	8.23E-04
Th-229	1.30E-12
Th-230	1.86E-09
Th-232	4.56E-16
U-233	4.69E-09
U-234	4.38E-05
U-235	5.39E-07
U-236	2.31E-06
U-238	2.19E-09

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF006.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF006.01	2.7
55-gal POC - 12" w/ Liner	WP-RF006.01	233.0
Shipped Total		235.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	8.48
Aluminum-based Metals/Alloys	0.00
Other Metals	0.06
Other Inorganic Materials	32.83
Cellulosics	0.03
Rubber	0.00
Plastics	0.67
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.45E+00
Np-237	4.54E-05
Pu-238	1.93E+00
Pu-239	3.91E+01
Pu-240	9.45E+00
Pu-241	1.22E+02
Pu-242	1.26E-03
Th-229	1.16E-12
Th-230	8.80E-09
Th-232	1.56E-15
U-233	1.95E-09
U-234	1.08E-04
U-235	1.39E-06
U-236	4.21E-06
U-238	5.89E-09

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF008.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF008.01	4.4
55-gal Drum Dir Ld w/o Liner	WP-RF008.01	0.2
55-gal POC - 12" w/ Liner	WP-RF008.01	90.7
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF008.01	1.9
Shipped Total		97.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	5.36
Aluminum-based Metals/Alloys	0.10
Other Metals	1.39
Other Inorganic Materials	56.30
Cellulosics	0.36
Rubber	0.00
Plastics	1.05
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.92E+00
Np-237	1.60E-04
Pu-238	2.02E+00
Pu-239	3.49E+01
Pu-240	9.58E+00
Pu-241	1.05E+02
Pu-242	1.40E-03
Th-229	1.85E-12
Th-230	1.91E-09
Th-232	4.49E-16
U-233	5.08E-09
U-234	4.99E-05
U-235	5.58E-07
U-236	2.27E-06
U-238	7.76E-10

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF009.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Salt Waste	Waste Matrix Code	S3141	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF009.01	3.3
55-gal Drum Dir Ld w/o Liner	WP-RF009.01	8.5
55-gal POC - 12" w/ Liner	WP-RF009.01	1311.2
SWB w/ 4 - 55-gal Drums w/o Liners	WP-RF009.01	3.8
Shipped Total		1326.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	10.46
Aluminum-based Metals/Alloys	0.00
Other Metals	4.01
Other Inorganic Materials	17.82
Cellulosics	0.04
Rubber	0.00
Plastics	0.93
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.05E+01
Np-237	3.79E-04
Pu-238	1.47E+00
Pu-239	4.14E+01
Pu-240	1.03E+01
Pu-241	6.84E+01
Pu-242	1.03E-03
Th-229	2.98E-12
Th-230	1.40E-09
Th-232	3.69E-16
U-233	9.66E-09
U-234	3.71E-05
U-235	5.17E-07
U-236	2.14E-06
U-238	2.05E-09

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF010.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF010.01	274.6
55-gal Drum Dir Ld w/o Liner	WP-RF010.01	12.9
SWB Dir Ld w/o Liner	WP-RF010.01	264.6
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF010.01	62.4
SWB w/ 4 - 55-gal Drums w/o Liners	WP-RF010.01	15.1
Shipped Total		629.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	12.18
Aluminum-based Metals/Alloys	8.77
Other Metals	0.98
Other Inorganic Materials	8.04
Cellulosics	36.45
Rubber	3.69
Plastics	9.49
Cements	0.00
Inorganic Matrix	0.29
Organic Matrix	0.03
Soils/gravel	0.13
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.28E+00
Am-243	6.52E-08
Np-237	1.29E-05
Pu-238	3.97E-01
Pu-239	9.94E+00
Pu-240	2.32E+00
Pu-241	2.82E+01
Pu-242	2.53E-04
Th-229	7.26E-14
Th-230	1.08E-08
Th-232	6.12E-17
U-233	2.76E-10
U-234	2.04E-04
U-235	6.39E-06
U-236	4.13E-07
U-238	5.68E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF011.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5129	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF011.01	49.5
55-gal Drum Dir Ld w/o Liner	WP-RF011.01	1.7
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF011.01	28.4
Shipped Total		79.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	10.77
Aluminum-based Metals/Alloys	0.01
Other Metals	0.04
Other Inorganic Materials	17.84
Cellulosics	1.61
Rubber	0.00
Plastics	1.75
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.82E+00
Np-237	7.79E-06
Pu-238	7.85E-01
Pu-239	1.87E+01
Pu-240	4.50E+00
Pu-241	4.73E+01
Pu-242	3.85E-04
Th-229	2.45E-14
Th-230	6.56E-10
Th-232	8.24E-17
U-233	1.20E-10
U-234	2.02E-05
U-235	3.79E-07
U-236	6.67E-07
U-238	5.29E-08

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF015.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF015.01	1.7
Shipped Total		1.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	19.17
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	5.05
Cellulosics	12.98
Rubber	0.00
Plastics	1.62
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.12E+00
Np-237	5.10E-05
Pu-238	5.67E-01
Pu-239	1.13E+01
Pu-240	2.63E+00
Pu-241	5.57E+01
Pu-242	3.50E-04
Th-229	2.44E-13
Th-230	1.86E-10
Th-232	4.82E-17
U-233	1.05E-09
U-234	8.20E-06
U-235	5.56E-08
U-236	3.91E-07
U-238	2.64E-13

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF029.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF029.01	13.9
55-gal Drum Dir Ld w/o Liner	WP-RF029.01	2.7
55-gal POC - 12" w/ Liner	WP-RF029.01	3.1
SWB Dir Ld w/o Liner	WP-RF029.01	4316.8
SWB w/ 4 - 55-gal Drums w/o Liners	WP-RF029.01	5.7
TDOP w/ 1 SWB w/o Liners	WP-RF029.01	4.5
Shipped Total		4346.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	168.15
Aluminum-based Metals/Alloys	1.51
Other Metals	0.58
Other Inorganic Materials	13.97
Cellulosics	17.25
Rubber	1.33
Plastics	30.02
Cements	0.00
Inorganic Matrix	0.01
Organic Matrix	0.03
Soils/gravel	0.16
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.85E-01
Am-243	3.33E-07
Cs-137	6.01E-09
Np-237	5.73E-06
Pu-238	8.45E-02
Pu-239	1.58E+00
Pu-240	3.80E-01
Pu-241	8.47E+00
Pu-242	5.09E-05
Pu-244	3.93E-21
Sr-90	4.10E-11
Th-229	1.70E-14
Th-230	6.91E-10
Th-232	4.45E-18
U-233	9.21E-11
U-234	1.97E-05
U-235	6.12E-07
U-236	4.50E-08
U-238	2.89E-07

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF031.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5313	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF031.01	15.2
55-gal Drum Dir Ld w/o Liner	WP-RF031.01	5.0
55-gal POC - 12" w/ Liner	WP-RF031.01	0.4
Shipped Total		20.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.34
Aluminum-based Metals/Alloys	0.00
Other Metals	0.23
Other Inorganic Materials	1.10
Cellulosics	9.68
Rubber	0.00
Plastics	46.42
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	6.07
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.42E-01
Np-237	2.57E-06
Pu-238	1.13E-01
Pu-239	2.34E+00
Pu-240	5.42E-01
Pu-241	1.12E+01
Pu-242	6.42E-05
Th-229	4.23E-15
Th-230	1.18E-09
Th-232	3.57E-18
U-233	3.10E-11
U-234	4.44E-05
U-235	1.42E-06
U-236	4.82E-08
U-238	1.99E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF032.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5129	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF032.01	3.1
55-gal POC - 12" w/ Liner	WP-RF032.01	206.1
Shipped Total		209.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	15.54
Aluminum-based Metals/Alloys	0.00
Other Metals	0.23
Other Inorganic Materials	31.96
Cellulosics	0.04
Rubber	0.00
Plastics	0.06
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.10E+01
Np-237	1.21E-04
Pu-238	1.49E+00
Pu-239	4.12E+01
Pu-240	9.67E+00
Pu-241	8.65E+01
Pu-242	7.24E-04
Th-229	7.77E-13
Th-230	1.16E-09
Th-232	2.55E-16
U-233	2.85E-09
U-234	3.44E-05
U-235	5.16E-07
U-236	1.72E-06
U-238	2.41E-09

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF033.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF033.01	12.1
55-gal Drum Dir Ld w/o Liner	WP-RF033.01	1.7
55-gal POC - 12" w/ Liner	WP-RF033.01	11.9
Shipped Total		25.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	16.37
Aluminum-based Metals/Alloys	0.00
Other Metals	1.27
Other Inorganic Materials	109.77
Cellulosics	0.20
Rubber	0.00
Plastics	27.33
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.09
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.50E+00
Np-237	3.14E-05
Pu-238	1.35E+00
Pu-239	3.12E+01
Pu-240	7.29E+00
Pu-241	1.09E+02
Pu-242	7.19E-04
Th-229	1.34E-13
Th-230	9.91E-10
Th-232	1.33E-16
U-233	5.97E-10
U-234	3.17E-05
U-235	5.69E-07
U-236	1.08E-06
U-238	2.34E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF036.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5420	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF036.01	44.1
Shipped Total		44.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.12
Aluminum-based Metals/Alloys	0.79
Other Metals	0.00
Other Inorganic Materials	488.73
Cellulosics	7.07
Rubber	0.00
Plastics	12.67
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.29
Soils/gravel	4.40
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.01E+00
Am-243	1.85E-06
Np-237	8.26E-06
Pu-238	3.05E-01
Pu-239	6.00E+00
Pu-240	1.40E+00
Pu-241	3.25E+01
Pu-242	1.85E-04
Th-229	1.41E-14
Th-230	1.54E-09
Th-232	9.23E-18
U-233	1.02E-10
U-234	5.84E-05
U-235	2.52E-06
U-236	1.25E-07
U-238	6.76E-05

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF101.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Combustible	Waste Matrix Code	S5390	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF101.01	114.6
55-gal Drum Dir Ld w/o Liner	WP-RF101.01	13.1
SWB Dir Ld w/o Liner	WP-RF101.01	24.6
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF101.01	22.7
Shipped Total		175.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	2.53
Aluminum-based Metals/Alloys	0.02
Other Metals	0.39
Other Inorganic Materials	15.34
Cellulosics	62.57
Rubber	1.27
Plastics	30.20
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.84
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.98E+00
Am-243	6.04E-06
Np-237	1.34E-05
Pu-238	4.60E-01
Pu-239	9.65E+00
Pu-240	2.26E+00
Pu-241	3.88E+01
Pu-242	2.64E-04
Th-229	5.71E-14
Th-230	1.08E-08
Th-232	4.13E-17
U-233	2.54E-10
U-234	2.44E-04
U-235	7.76E-06
U-236	3.35E-07
U-238	4.88E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D043, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF101.29-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Combustible	Waste Matrix Code	S5390	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF101.29	25.4
55-gal Drum Dir Ld w/o Liner	WP-RF101.29	3.1
SWB Dir Ld w/o Liner	WP-RF101.29	1.9
Shipped Total		30.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.43
Aluminum-based Metals/Alloys	0.03
Other Metals	0.00
Other Inorganic Materials	12.48
Cellulosics	51.65
Rubber	5.43
Plastics	47.43
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.03E+00
Np-237	6.44E-06
Pu-238	2.53E-01
Pu-239	5.15E+00
Pu-240	1.20E+00
Pu-241	1.93E+01
Pu-242	1.39E-04
Th-229	3.76E-14
Th-230	9.91E-09
Th-232	3.16E-17
U-233	1.41E-10
U-234	1.86E-04
U-235	5.93E-06
U-236	2.13E-07
U-238	6.71E-06

Haz. Waste No(s).

F001

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF101.30-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Combustible	Waste Matrix Code	S5390	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF101.30	79.5
55-gal Drum Dir Ld w/o Liner	WP-RF101.30	5.8
SWB Dir Ld w/o Liner	WP-RF101.30	3.8
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF101.30	24.6
SWB w/ 4 - 55-gal Drums w/o Liners	WP-RF101.30	3.8
Shipped Total		117.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.84
Aluminum-based Metals/Alloys	0.00
Other Metals	0.09
Other Inorganic Materials	2.31
Cellulosics	40.50
Rubber	0.80
Plastics	37.94
Cements	0.00
Inorganic Matrix	0.04
Organic Matrix	0.03
Soils/gravel	0.01
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.10E+00
Am-243	2.67E-06
Np-237	2.28E-05
Pu-238	3.28E-01
Pu-239	7.49E+00
Pu-240	1.76E+00
Pu-241	2.52E+01
Pu-242	2.16E-04
Th-229	1.36E-13
Th-230	7.71E-09
Th-232	4.64E-17
U-233	5.10E-10
U-234	1.46E-04
U-235	4.55E-06
U-236	3.13E-07
U-238	1.57E-06

Haz. Waste No(s).

F001, F002

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF101.31-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Combustible	Waste Matrix Code	S5390	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF101.31	43.9
55-gal Drum Dir Ld w/o Liner	WP-RF101.31	5.4
SWB Dir Ld w/o Liner	WP-RF101.31	9.5
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF101.31	3.8
Shipped Total		62.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	4.86
Aluminum-based Metals/Alloys	0.00
Other Metals	0.12
Other Inorganic Materials	2.09
Cellulosics	65.86
Rubber	0.69
Plastics	43.00
Cements	0.00
Inorganic Matrix	0.02
Organic Matrix	0.02
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.11E+00
Am-243	2.18E-07
Np-237	5.70E-06
Pu-238	1.68E-01
Pu-239	3.74E+00
Pu-240	8.88E-01
Pu-241	1.20E+01
Pu-242	1.32E-04
Th-229	4.04E-14
Th-230	5.78E-09
Th-232	3.19E-17
U-233	1.35E-10
U-234	9.34E-05
U-235	2.94E-06
U-236	1.84E-07
U-238	1.33E-06

Haz. Waste No(s).

F001, F002, F005

No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF101.35-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Combustible	Waste Matrix Code	S5390	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF101.35	51.2
55-gal Drum Dir Ld w/o Liner	WP-RF101.35	17.1
SWB Dir Ld w/o Liner	WP-RF101.35	3.8
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF101.35	7.6
Shipped Total		79.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.72
Aluminum-based Metals/Alloys	0.00
Other Metals	0.57
Other Inorganic Materials	2.66
Cellulosics	48.15
Rubber	0.47
Plastics	58.97
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.01E+00
Np-237	2.63E-05
Pu-238	3.72E-01
Pu-239	8.02E+00
Pu-240	1.87E+00
Pu-241	3.11E+01
Pu-242	2.62E-04
Th-229	1.63E-13
Th-230	5.75E-08
Th-232	4.94E-17
U-233	6.03E-10
U-234	1.07E-03
U-235	3.42E-05
U-236	3.33E-07
U-238	2.75E-06

Haz. Waste No(s).

F005

No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF102.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF102.01	45.3
55-gal Drum Dir Ld w/o Liner	WP-RF102.01	0.6
SWB Dir Ld w/o Liner	WP-RF102.01	175.8
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF102.01	1.9
Shipped Total		223.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	234.12
Aluminum-based Metals/Alloys	0.50
Other Metals	9.83
Other Inorganic Materials	1.88
Cellulosics	6.47
Rubber	0.25
Plastics	4.10
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.72E-01
Am-243	8.92E-07
Cs-137	4.40E-05
Np-237	6.69E-06
Pu-238	1.32E-01
Pu-239	2.56E+00
Pu-240	6.10E-01
Pu-241	1.26E+01
Pu-242	7.93E-05
Th-229	3.01E-14
Th-230	8.69E-10
Th-232	1.12E-17
U-233	1.32E-10
U-234	2.03E-05
U-235	6.21E-07
U-236	9.05E-08
U-238	1.78E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D029, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF102.31-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Lead/Cadmium Metal Waste	Waste Matrix Code	S5112	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF102.31	22.3
55-gal Drum Dir Ld w/o Liner	WP-RF102.31	1.0
55-gal POC - 12" w/ Liner	WP-RF102.31	0.6
SWB Dir Ld w/o Liner	WP-RF102.31	96.4
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF102.31	3.8
Shipped Total		124.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	189.33
Aluminum-based Metals/Alloys	0.36
Other Metals	147.87
Other Inorganic Materials	0.16
Cellulosics	5.66
Rubber	1.89
Plastics	3.08
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.14E+00
Am-243	1.55E-07
Np-237	8.83E-06
Pu-238	1.10E-01
Pu-239	2.21E+00
Pu-240	5.24E-01
Pu-241	1.01E+01
Pu-242	6.82E-05
Th-229	3.82E-14
Th-230	2.91E-09
Th-232	9.59E-18
U-233	1.69E-10
U-234	6.54E-05
U-235	2.23E-06
U-236	7.77E-08
U-238	1.72E-05

Haz. Waste No(s).

D008

No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF104.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5122	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF104.01	35.2
55-gal Drum Dir Ld w/o Liner	WP-RF104.01	2.1
55-gal POC - 12" w/ Liner	WP-RF104.01	7.7
SWB Dir Ld w/o Liner	WP-RF104.01	5.7
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF104.01	1.9
SWB w/ 4 - 55-gal Drums w/o Liners	WP-RF104.01	1.9
Shipped Total		54.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	5.65
Aluminum-based Metals/Alloys	0.01
Other Metals	1.43
Other Inorganic Materials	213.89
Cellulosics	7.04
Rubber	0.06
Plastics	5.63
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.23E+00
Am-243	4.20E-06
Np-237	1.87E-05
Pu-238	2.96E-01
Pu-239	7.52E+00
Pu-240	1.77E+00
Pu-241	2.36E+01
Pu-242	1.72E-04
Th-229	5.35E-14
Th-230	6.18E-10
Th-232	2.08E-17
U-233	2.93E-10
U-234	1.89E-05
U-235	5.52E-07
U-236	2.10E-07
U-238	2.58E-06

Haz. Waste No(s).

D005, D008, D009,
D022, F001, F002,
F005No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF107.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3190	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF107.01	63.4
Shipped Total		63.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.17
Aluminum-based Metals/Alloys	0.00
Other Metals	0.73
Other Inorganic Materials	13.61
Cellulosics	0.00
Rubber	0.00
Plastics	1.11
Cements	0.00
Inorganic Matrix	776.54
Organic Matrix	11.45
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.13E+01
Np-237	2.62E-04
Pu-238	1.49E-01
Pu-239	3.01E+00
Pu-240	6.97E-01
Pu-241	1.60E+01
Pu-242	9.12E-05
Th-229	4.32E-13
Th-230	7.32E-09
Th-232	4.60E-18
U-233	3.16E-09
U-234	2.72E-04
U-235	1.75E-05
U-236	6.20E-08
U-238	9.43E-04

Haz. Waste No(s).

D006, D007, D008,
D009, D011**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **RF107.03-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3190	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF107.03	60.7
55-gal Drum Dir Ld w/o Liner	WP-RF107.03	0.2
Shipped Total		60.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.45
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	1.09
Cements	0.00
Inorganic Matrix	819.47
Organic Matrix	0.04
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.36E-01
Np-237	2.02E-06
Pu-238	1.90E-02
Pu-239	3.80E-01
Pu-240	8.83E-02
Pu-241	2.04E+00
Pu-242	1.16E-05
Th-229	3.44E-15
Th-230	3.42E-08
Th-232	5.82E-19
U-233	2.49E-11
U-234	1.27E-03
U-235	1.50E-04
U-236	7.86E-09
U-238	1.13E-02

Haz. Waste No(s).

F001, F002, F005, F006, F007, F009

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF107.04-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3190	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF107.04	100.9
55-gal Drum Dir Ld w/o Liner	WP-RF107.04	1.9
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF107.04	7.6
Shipped Total		110.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.01
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.07
Rubber	0.00
Plastics	1.64
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	954.33
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.31E-01
Np-237	4.55E-06
Pu-238	3.74E-02
Pu-239	7.55E-01
Pu-240	1.75E-01
Pu-241	4.02E+00
Pu-242	2.29E-05
Th-229	7.74E-15
Th-230	5.20E-10
Th-232	1.15E-18
U-233	5.61E-11
U-234	1.94E-05
U-235	1.91E-06
U-236	1.56E-08
U-238	1.40E-04

Haz. Waste No(s).

D022, D028, D029,
D030, D032, D034,
F001, F002, F005No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF107.05-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3190	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF107.05	4.4
Shipped Total		4.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.63
Cellulosics	8.65
Rubber	0.00
Plastics	2.35
Cements	0.00
Inorganic Matrix	601.28
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.07E+00
Np-237	6.15E-06
Pu-238	2.33E-01
Pu-239	4.67E+00
Pu-240	1.09E+00
Pu-241	2.50E+01
Pu-242	1.42E-04
Th-229	1.01E-14
Th-230	6.09E-08
Th-232	7.16E-18
U-233	7.39E-11
U-234	2.26E-03
U-235	7.28E-05
U-236	9.66E-08
U-238	6.43E-07

Haz. Waste No(s).

D004, D005, D009, D010, D022, D027, D028, D029, D032, D033, D034, D043, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF107.06-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3190	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF107.06	14.4
Shipped Total		14.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.49
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	8.25
Cements	0.00
Inorganic Matrix	873.52
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.90E-02
Np-237	6.11E-08
Pu-238	1.05E-02
Pu-239	2.13E-01
Pu-240	4.94E-02
Pu-241	1.13E+00
Pu-242	6.46E-06
Th-229	8.03E-17
Th-230	4.34E-09
Th-232	3.25E-19
U-233	6.26E-13
U-234	1.61E-04
U-235	1.83E-05
U-236	4.39E-09
U-238	1.40E-03

Haz. Waste No(s).

F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF107.07-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3190	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF107.07	57.0
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF107.07	1.9
Shipped Total		58.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	3.51
Cements	0.00
Inorganic Matrix	1172.21
Organic Matrix	4.62
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.82E+00
Am-243	2.88E-05
Np-237	4.16E-05
Pu-238	6.24E-01
Pu-239	1.23E+01
Pu-240	2.87E+00
Pu-241	6.66E+01
Pu-242	3.79E-04
Th-229	7.10E-14
Th-230	6.26E-08
Th-232	1.89E-17
U-233	5.14E-10
U-234	2.32E-03
U-235	7.51E-05
U-236	2.55E-07
U-238	3.74E-05

Haz. Waste No(s).

F001, F002, F005,
F006, F007, F009,
P030, P098, P099,
P106, U003, U103,
U108

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **RF110.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF110.01	8.3
55-gal Drum Dir Ld w/o Liner	WP-RF110.01	0.6
55-gal POC - 12" w/ Liner	WP-RF110.01	0.2
Shipped Total		9.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	4.57
Aluminum-based Metals/Alloys	5.49
Other Metals	0.08
Other Inorganic Materials	9.72
Cellulosics	50.40
Rubber	4.90
Plastics	26.12
Cements	0.00
Inorganic Matrix	0.07
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.13E+00
Am-243	1.88E-04
Np-237	2.65E-05
Pu-238	6.76E-01
Pu-239	1.37E+01
Pu-240	3.20E+00
Pu-241	5.50E+01
Pu-242	7.16E-04
Th-229	9.48E-14
Th-230	4.51E-09
Th-232	5.86E-17
U-233	4.44E-10
U-234	1.05E-04
U-235	3.33E-06
U-236	4.74E-07
U-238	2.12E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D029, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF110.05-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF110.05	16.6
55-gal Drum Dir Ld w/o Liner	WP-RF110.05	1.7
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF110.05	11.3
SWB w/ 4 - 55-gal Drums w/o Liners	WP-RF110.05	1.9
Shipped Total		31.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	7.11
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	7.40
Cellulosics	6.35
Rubber	0.07
Plastics	17.62
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.23
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.53E+00
Np-237	6.95E-06
Pu-238	6.46E-01
Pu-239	1.46E+01
Pu-240	3.38E+00
Pu-241	3.65E+01
Pu-242	3.25E-04
Th-229	2.78E-14
Th-230	8.76E-09
Th-232	8.92E-17
U-233	1.18E-10
U-234	1.68E-04
U-235	5.14E-06
U-236	6.02E-07
U-238	5.28E-07

Haz. Waste No(s).

D022, F001, F002

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF113.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Organics	Waste Matrix Code	S3114	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF113.01	0.4
Shipped Total		0.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	108.89
Cellulosics	0.48
Rubber	0.00
Plastics	12.02
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.42E-01
Np-237	2.40E-06
Pu-238	4.36E-02
Pu-239	8.91E-01
Pu-240	2.07E-01
Pu-241	4.32E+00
Pu-242	2.71E-05
Th-229	1.13E-14
Th-230	1.43E-11
Th-232	3.79E-18
U-233	4.90E-11
U-234	6.32E-07
U-235	4.39E-09
U-236	3.07E-08
U-238	2.05E-14

Haz. Waste No(s).

D007, D010, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF115.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF115.01	17.3
55-gal Drum Dir Ld w/o Liner	WP-RF115.01	1.5
55-gal POC - 12" w/ Liner	WP-RF115.01	86.7
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF115.01	5.7
SWB w/ 4 - 55-gal Drums w/o Liners	WP-RF115.01	3.8
Shipped Total		114.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	16.78
Aluminum-based Metals/Alloys	0.01
Other Metals	11.65
Other Inorganic Materials	53.37
Cellulosics	2.41
Rubber	0.01
Plastics	3.38
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.01
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.15E+00
Np-237	1.53E-05
Pu-238	9.04E-01
Pu-239	2.20E+01
Pu-240	5.13E+00
Pu-241	4.35E+01
Pu-242	4.30E-04
Th-229	5.47E-14
Th-230	6.12E-10
Th-232	9.39E-17
U-233	2.56E-10
U-234	2.01E-05
U-235	3.83E-07
U-236	7.61E-07
U-238	5.44E-06

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF116.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	WP-RF116.01	4.0
Shipped Total		4.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	19.23
Aluminum-based Metals/Alloys	0.00
Other Metals	16.09
Other Inorganic Materials	32.79
Cellulosics	0.00
Rubber	0.00
Plastics	3.23
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.45E+00
Np-237	3.61E-05
Pu-238	6.44E-01
Pu-239	2.48E+01
Pu-240	5.75E+00
Pu-241	3.16E+01
Pu-242	3.84E-04
Th-229	1.52E-13
Th-230	2.11E-10
Th-232	1.05E-16
U-233	6.78E-10
U-234	9.32E-06
U-235	1.22E-07
U-236	8.52E-07
U-238	2.89E-13

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF117.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF117.01	1.7
55-gal Drum Dir Ld w/o Liner	WP-RF117.01	0.2
Shipped Total		1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.50
Aluminum-based Metals/Alloys	0.00
Other Metals	1.28
Other Inorganic Materials	93.11
Cellulosics	8.65
Rubber	0.00
Plastics	8.22
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.60E+00
Np-237	2.19E-05
Pu-238	6.54E-01
Pu-239	1.31E+01
Pu-240	3.04E+00
Pu-241	6.49E+01
Pu-242	3.90E-04
Th-229	6.32E-14
Th-230	2.82E-08
Th-232	3.56E-17
U-233	3.46E-10
U-234	7.87E-04
U-235	2.51E-05
U-236	3.61E-07
U-238	2.22E-07

Haz. Waste No(s).

D007

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF118.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3111	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF118.01	1.0
55-gal POC - 12" w/ Liner	WP-RF118.01	1431.0
55-gal POC - 12" w/o Liner	WP-RF118.01	0.2
Shipped Total		1432.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	11.29
Aluminum-based Metals/Alloys	0.00
Other Metals	1.26
Other Inorganic Materials	16.19
Cellulosics	0.00
Rubber	0.00
Plastics	1.32
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.19E+00
Am-243	8.75E-07
Np-237	5.70E-05
Pu-238	2.89E+00
Pu-239	4.66E+01
Pu-240	1.25E+01
Pu-241	1.37E+02
Pu-242	1.52E-03
Th-229	4.34E-13
Th-230	1.40E-08
Th-232	4.50E-16
U-233	1.42E-09
U-234	2.52E-04
U-235	6.53E-06
U-236	2.60E-06
U-238	1.40E-07

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF119.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3129	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF119.01	19.3
55-gal Drum Dir Ld w/o Liner	WP-RF119.01	3.7
55-gal POC - 12" w/ Liner	WP-RF119.01	1.0
Shipped Total		24.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	57.80
Aluminum-based Metals/Alloys	0.02
Other Metals	0.85
Other Inorganic Materials	8.24
Cellulosics	0.30
Rubber	0.00
Plastics	15.73
Cements	0.00
Inorganic Matrix	245.52
Organic Matrix	1.90
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.47E+00
Np-237	1.16E-05
Pu-238	3.07E-01
Pu-239	6.09E+00
Pu-240	1.44E+00
Pu-241	3.14E+01
Pu-242	1.85E-04
Th-229	1.96E-14
Th-230	5.62E-10
Th-232	9.46E-18
U-233	1.42E-10
U-234	2.22E-05
U-235	7.28E-07
U-236	1.28E-07
U-238	8.83E-06

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF121.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5129	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	WP-RF121.01	46.0
Shipped Total		46.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	5.55
Aluminum-based Metals/Alloys	0.00
Other Metals	6.66
Other Inorganic Materials	11.10
Cellulosics	0.00
Rubber	0.00
Plastics	1.33
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.17E+00
Np-237	7.32E-06
Pu-238	1.39E+00
Pu-239	4.29E+01
Pu-240	1.03E+01
Pu-241	6.80E+01
Pu-242	6.64E-04
Th-229	9.54E-15
Th-230	7.86E-10
Th-232	1.20E-16
U-233	6.90E-11
U-234	2.98E-05
U-235	6.14E-07
U-236	1.22E-06
U-238	3.94E-09

Haz. Waste No(s).

D007, D008

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF122.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3129	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF122.01	0.2
55-gal Drum Dir Ld w/o Liner	WP-RF122.01	1.5
55-gal POC - 12" w/ Liner	WP-RF122.01	33.9
Shipped Total		35.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	10.47
Aluminum-based Metals/Alloys	0.00
Other Metals	12.08
Other Inorganic Materials	21.10
Cellulosics	0.00
Rubber	0.00
Plastics	2.56
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.80E+00
Np-237	1.59E-03
Pu-238	1.76E+00
Pu-239	3.86E+01
Pu-240	9.29E+00
Pu-241	7.72E+01
Pu-242	9.78E-04
Th-229	7.92E-12
Th-230	5.75E-10
Th-232	1.70E-16
U-233	3.38E-08
U-234	2.54E-05
U-235	1.90E-07
U-236	1.38E-06
U-238	7.38E-13

Haz. Waste No(s).

D006, D007, D008,
D009, F001, F002,
F005No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF122.03-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3129	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF122.03	4.4
Shipped Total		4.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	424.32
Cellulosics	0.00
Rubber	0.00
Plastics	6.64
Cements	0.00
Inorganic Matrix	163.06
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.62E+00
Np-237	9.31E-05
Pu-238	1.61E-01
Pu-239	3.25E+00
Pu-240	7.54E-01
Pu-241	1.73E+01
Pu-242	9.85E-05
Th-229	1.62E-13
Th-230	5.58E-08
Th-232	4.97E-18
U-233	1.17E-09
U-234	2.07E-03
U-235	1.39E-04
U-236	6.71E-08
U-238	7.77E-03

Haz. Waste No(s).

D004, D005, D009, D010, F001, F002, F005, F006, F007, F009

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF122.04-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3129	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF122.04	54.1
Shipped Total		54.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	662.72
Cellulosics	0.28
Rubber	0.00
Plastics	8.45
Cements	0.00
Inorganic Matrix	1.50
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.73E+00
Np-237	6.89E-05
Pu-238	1.48E-01
Pu-239	2.98E+00
Pu-240	6.92E-01
Pu-241	1.59E+01
Pu-242	9.06E-05
Th-229	1.20E-13
Th-230	1.65E-08
Th-232	4.56E-18
U-233	8.64E-10
U-234	6.13E-04
U-235	6.47E-05
U-236	6.15E-08
U-238	4.33E-03

Haz. Waste No(s).

D006, D007, D008,
D009, D011**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **RF122.05-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3129	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF122.05	16.2
Shipped Total		16.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.15
Other Inorganic Materials	519.58
Cellulosics	0.00
Rubber	0.00
Plastics	49.09
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.81E-01
Np-237	8.32E-07
Pu-238	1.69E-02
Pu-239	3.37E-01
Pu-240	7.83E-02
Pu-241	1.81E+00
Pu-242	1.03E-05
Th-229	1.32E-15
Th-230	3.34E-08
Th-232	5.16E-19
U-233	9.75E-12
U-234	1.24E-03
U-235	6.46E-05
U-236	6.97E-09
U-238	2.40E-03

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **RF122.06-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3129	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF122.06	0.4
55-gal POC - 12" w/ Liner	WP-RF122.06	6.9
Shipped Total		7.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	9.30
Aluminum-based Metals/Alloys	0.00
Other Metals	12.03
Other Inorganic Materials	48.94
Cellulosics	0.00
Rubber	0.00
Plastics	2.65
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.80E+00
Np-237	5.64E-05
Pu-238	1.37E+00
Pu-239	3.47E+01
Pu-240	8.19E+00
Pu-241	6.81E+01
Pu-242	8.75E-04
Th-229	2.41E-13
Th-230	2.43E-09
Th-232	1.50E-16
U-233	1.07E-09
U-234	6.38E-05
U-235	1.95E-06
U-236	1.21E-06
U-238	3.86E-05

Haz. Waste No(s).

D006, D007, D008,
D009, D011**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **RF123.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	WP-RF123.01	7.5
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF123.01	1.9
Shipped Total		9.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	5.09
Aluminum-based Metals/Alloys	0.00
Other Metals	5.89
Other Inorganic Materials	9.14
Cellulosics	0.00
Rubber	0.00
Plastics	1.18
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.74E+00
Np-237	1.76E-05
Pu-238	1.07E+00
Pu-239	3.23E+01
Pu-240	7.51E+00
Pu-241	6.59E+01
Pu-242	5.30E-04
Th-229	5.25E-14
Th-230	2.00E-09
Th-232	1.38E-16
U-233	2.61E-10
U-234	5.22E-05
U-235	1.57E-06
U-236	1.11E-06
U-238	1.06E-08

Haz. Waste No(s).

D006, D007, D008,
D009, D018, D019,
D022, D028, D029,
D043, F001, F002,
F005

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **RF123.02-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF123.02	0.6
55-gal Drum Dir Ld w/o Liner	WP-RF123.02	0.2
Shipped Total		0.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	29.16
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	128.43
Cellulosics	6.49
Rubber	0.00
Plastics	2.51
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.76E-02
Np-237	1.58E-08
Pu-238	5.04E-03
Pu-239	9.99E-02
Pu-240	2.33E-02
Pu-241	5.39E-01
Pu-242	3.07E-06
Th-229	9.30E-18
Th-230	7.58E-09
Th-232	1.53E-19
U-233	1.01E-13
U-234	2.81E-04
U-235	3.24E-05
U-236	2.07E-09
U-238	2.52E-03

Haz. Waste No(s).

D010, F001, F002, F005, F006, F007, F009

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF123.03-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF123.03	11.9
55-gal Drum Dir Ld w/o Liner	WP-RF123.03	0.2
Shipped Total		12.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	5.34
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	25.98
Cellulosics	11.41
Rubber	0.00
Plastics	2.72
Cements	0.00
Inorganic Matrix	0.96
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.48E+01
Np-237	2.16E-04
Pu-238	8.52E-01
Pu-239	1.71E+01
Pu-240	3.97E+00
Pu-241	8.74E+01
Pu-242	5.23E-04
Th-229	6.21E-13
Th-230	6.67E-10
Th-232	4.65E-17
U-233	3.40E-09
U-234	2.34E-05
U-235	1.64E-06
U-236	4.71E-07
U-238	1.22E-04

Haz. Waste No(s).

D006, D007, D008,
D009No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF123.04-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF123.04	44.5
Shipped Total		44.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.39
Aluminum-based Metals/Alloys	0.00
Other Metals	0.01
Other Inorganic Materials	17.76
Cellulosics	1.10
Rubber	0.00
Plastics	0.27
Cements	0.00
Inorganic Matrix	0.76
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.11E+00
Np-237	2.24E-05
Pu-238	9.11E-01
Pu-239	1.81E+01
Pu-240	4.23E+00
Pu-241	9.34E+01
Pu-242	5.59E-04
Th-229	6.34E-14
Th-230	8.33E-10
Th-232	4.95E-17
U-233	3.48E-10
U-234	2.84E-05
U-235	7.02E-07
U-236	5.01E-07
U-238	5.86E-06

Haz. Waste No(s).

D007, D008, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF124.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5311	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF124.01	91.5
55-gal Drum Dir Ld w/o Liner	WP-RF124.01	0.8
SWB Dir Ld w/o Liner	WP-RF124.01	1.9
Shipped Total		94.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.02
Aluminum-based Metals/Alloys	0.01
Other Metals	223.31
Other Inorganic Materials	0.82
Cellulosics	0.75
Rubber	129.33
Plastics	8.27
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.17E-01
Am-243	4.78E-08
Np-237	1.56E-05
Pu-238	1.19E-01
Pu-239	2.62E+00
Pu-240	6.04E-01
Pu-241	1.08E+01
Pu-242	6.99E-05
Th-229	1.08E-13
Th-230	4.06E-09
Th-232	1.59E-17
U-233	3.88E-10
U-234	7.63E-05
U-235	1.33E-06
U-236	1.07E-07
U-238	1.51E-06

Haz. Waste No(s).

D008

No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF124.02-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5311	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF124.02	13.1
55-gal Drum Dir Ld w/o Liner	WP-RF124.02	0.2
Shipped Total		13.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.26
Aluminum-based Metals/Alloys	0.00
Other Metals	207.17
Other Inorganic Materials	2.78
Cellulosics	0.98
Rubber	123.26
Plastics	8.93
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.41E-01
Np-237	1.09E-05
Pu-238	2.39E-01
Pu-239	5.01E+00
Pu-240	1.15E+00
Pu-241	2.13E+01
Pu-242	1.38E-04
Th-229	7.04E-14
Th-230	1.36E-09
Th-232	3.02E-17
U-233	2.57E-10
U-234	2.73E-05
U-235	7.74E-07
U-236	2.04E-07
U-238	6.59E-09

Haz. Waste No(s).

D008, D022, D028,
F001, F002**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **RF125.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Organics	Waste Matrix Code	S3900	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF125.01	3.3
55-gal Drum Dir Ld w/o Liner	WP-RF125.01	1.0
55-gal POC - 12" w/ Liner	WP-RF125.01	6.2
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF125.01	3.8
Shipped Total		14.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	10.07
Aluminum-based Metals/Alloys	0.00
Other Metals	2.84
Other Inorganic Materials	2.40
Cellulosics	0.76
Rubber	0.00
Plastics	1.35
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	11.23
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.54E+01
Np-237	3.18E-04
Pu-238	1.08E+00
Pu-239	2.69E+01
Pu-240	6.22E+00
Pu-241	7.44E+01
Pu-242	5.32E-04
Th-229	9.71E-13
Th-230	2.21E-08
Th-232	7.28E-17
U-233	5.23E-09
U-234	6.19E-04
U-235	2.00E-05
U-236	7.38E-07
U-238	4.37E-05

Haz. Waste No(s).

D004, D005, D009, D010, D022, D027, D028, D029, D032, D033, D034, D043, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF126.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Organics	Waste Matrix Code	S3229	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	WP-RF126.01	1.0
Shipped Total		1.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	8.65
Aluminum-based Metals/Alloys	0.00
Other Metals	11.54
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	2.31
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	13.94
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.29E+00
Np-237	5.21E-06
Pu-238	1.45E+00
Pu-239	3.73E+01
Pu-240	8.35E+00
Pu-241	8.15E+01
Pu-242	5.23E-04
Th-229	5.34E-15
Th-230	1.69E-09
Th-232	9.78E-17
U-233	4.32E-11
U-234	5.51E-05
U-235	1.39E-06
U-236	9.90E-07
U-238	1.10E-08

Haz. Waste No(s).

D007

No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF126.04-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Organics	Waste Matrix Code	S3229	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	WP-RF126.04	2.1
Shipped Total		2.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	6.06
Aluminum-based Metals/Alloys	0.00
Other Metals	8.08
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	1.62
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	11.15
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.40E+00
Np-237	6.72E-06
Pu-238	1.20E+00
Pu-239	3.40E+01
Pu-240	7.85E+00
Pu-241	6.91E+01
Pu-242	6.09E-04
Th-229	6.97E-15
Th-230	2.49E-09
Th-232	9.20E-17
U-233	5.62E-11
U-234	7.61E-05
U-235	1.76E-06
U-236	9.31E-07
U-238	1.51E-08

Haz. Waste No(s).

D007, D008, F001,
F002**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **RF128.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	WP-RF128.01	198.2
Shipped Total		198.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	4.71
Aluminum-based Metals/Alloys	0.00
Other Metals	5.88
Other Inorganic Materials	9.14
Cellulosics	0.00
Rubber	0.00
Plastics	1.18
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.89E+00
Np-237	1.99E-05
Pu-238	1.89E+00
Pu-239	4.29E+01
Pu-240	1.04E+01
Pu-241	8.98E+01
Pu-242	7.61E-04
Th-229	1.01E-13
Th-230	9.24E-10
Th-232	2.74E-16
U-233	3.96E-10
U-234	3.35E-05
U-235	2.70E-07
U-236	1.85E-06
U-238	1.47E-10

Haz. Waste No(s).

D005, D006, D007,
D008, D010, D011No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF129.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF129.01	8.3
55-gal Drum Dir Ld w/o Liner	WP-RF129.01	0.6
55-gal POC - 12" w/ Liner	WP-RF129.01	3.3
SWB Dir Ld w/o Liner	WP-RF129.01	455.5
Shipped Total		467.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	151.84
Aluminum-based Metals/Alloys	1.45
Other Metals	23.51
Other Inorganic Materials	20.31
Cellulosics	14.40
Rubber	2.70
Plastics	26.27
Cements	0.00
Inorganic Matrix	0.22
Organic Matrix	0.61
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.55E-01
Am-243	2.19E-07
Cs-137	2.23E-07
Np-237	4.70E-06
Pu-238	9.67E-02
Pu-239	1.86E+00
Pu-240	4.44E-01
Pu-241	9.54E+00
Pu-242	5.81E-05
Pu-244	1.52E-23
Th-229	1.35E-14
Th-230	3.01E-09
Th-232	5.21E-18
U-233	7.38E-11
U-234	8.42E-05
U-235	2.93E-06
U-236	5.27E-08
U-238	1.33E-06

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF129.05-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF129.05	2.1
55-gal Drum Dir Ld w/o Liner	WP-RF129.05	0.2
SWB Dir Ld w/o Liner	WP-RF129.05	446.0
Shipped Total		448.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	182.14
Aluminum-based Metals/Alloys	0.66
Other Metals	61.87
Other Inorganic Materials	6.36
Cellulosics	8.09
Rubber	2.72
Plastics	22.28
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.26
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.57E-01
Am-243	7.64E-07
Np-237	2.26E-05
Pu-238	9.10E-02
Pu-239	1.68E+00
Pu-240	4.04E-01
Pu-241	9.22E+00
Pu-242	5.51E-05
Th-229	6.98E-14
Th-230	4.80E-10
Th-232	4.74E-18
U-233	3.75E-10
U-234	1.39E-05
U-235	4.20E-07
U-236	4.80E-08
U-238	1.41E-07

Haz. Waste No(s).

D008

No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF130.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF130.01	25.4
55-gal Drum Dir Ld w/o Liner	WP-RF130.01	1.9
SWB w/ 4 - 55-gal Drums w/ Liners	WP-RF130.01	11.3
Shipped Total		38.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	13.34
Aluminum-based Metals/Alloys	1.41
Other Metals	6.65
Other Inorganic Materials	8.05
Cellulosics	0.81
Rubber	0.13
Plastics	7.57
Cements	0.00
Inorganic Matrix	2.91
Organic Matrix	7.06
Soils/gravel	0.03
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.26E+00
Cm-244	3.48E-09
Cs-137	1.74E-05
Np-237	2.12E-04
Pu-238	6.45E-01
Pu-239	1.28E+01
Pu-240	2.99E+00
Pu-241	6.61E+01
Pu-242	3.95E-04
Pu-244	5.98E-18
Sr-90	8.46E-04
Th-229	6.56E-13
Th-230	1.38E-07
Th-232	1.18E-10
U-233	3.53E-09
U-234	1.05E-03
U-235	4.10E-05
U-236	3.55E-07
U-238	5.93E-05

Haz. Waste No(s).

D004, D005, D008, D009, D010, D022, D027, D028, D029, D032, D033, D034, D043, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF134.02-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Soils	Waste Matrix Code	S4200	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
SWB Dir Ld w/o Liner	WP-RF134.02	11.3
Shipped Total		11.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	3.35
Aluminum-based Metals/Alloys	2.23
Other Metals	0.00
Other Inorganic Materials	0.63
Cellulosics	10.66
Rubber	0.00
Plastics	10.56
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	666.10
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.87E-02
Np-237	2.25E-08
Pu-238	4.05E-03
Pu-239	8.16E-02
Pu-240	1.90E-02
Pu-241	4.16E-01
Pu-242	2.49E-06
Th-229	2.29E-17
Th-230	8.44E-13
Th-232	2.22E-19
U-233	1.86E-13
U-234	4.66E-08
U-235	3.22E-10
U-236	2.25E-09
U-238	1.50E-15

Haz. Waste No(s).

F001, F002, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF135.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Organics	Waste Matrix Code	S3290	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF135.01	2.3
Shipped Total		2.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	5.51
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	802.10
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.19E+00
Np-237	2.26E-05
Pu-238	7.08E-02
Pu-239	1.45E+00
Pu-240	3.35E-01
Pu-241	7.32E+00
Pu-242	4.38E-05
Th-229	6.59E-14
Th-230	5.07E-09
Th-232	3.93E-18
U-233	3.59E-10
U-234	1.41E-04
U-235	1.63E-05
U-236	3.98E-08
U-238	1.26E-03

Haz. Waste No(s).

D022, D026, D027,
D029, D030, D032,
D034, D036, D037,
F001, F002No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF135.02-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Organics	Waste Matrix Code	S3290	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF135.02	10.4
Shipped Total		10.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.82
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.61
Rubber	0.00
Plastics	0.42
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	446.57
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.32E-01
Np-237	1.27E-06
Pu-238	2.95E-02
Pu-239	5.94E-01
Pu-240	1.38E-01
Pu-241	3.16E+00
Pu-242	1.80E-05
Th-229	2.18E-15
Th-230	1.07E-08
Th-232	9.08E-19
U-233	1.58E-11
U-234	3.96E-04
U-235	1.28E-05
U-236	1.23E-08
U-238	1.13E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D026, D027, D028, D029, D030, D032, D034, D036, D043, F001, F002, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF137.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF137.01	0.4
Shipped Total		0.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	29.18
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	240.94
Cellulosics	0.00
Rubber	1.49
Plastics	20.22
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.30E-01
Np-237	8.51E-06
Pu-238	7.92E-02
Pu-239	1.64E+00
Pu-240	3.79E-01
Pu-241	8.21E+00
Pu-242	4.92E-05
Th-229	2.54E-14
Th-230	1.65E-11
Th-232	4.44E-18
U-233	1.38E-10
U-234	9.13E-07
U-235	6.47E-09
U-236	4.49E-08
U-238	2.97E-14

Haz. Waste No(s).

D007, D008

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF139.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3121	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF139.01	11.6
Shipped Total		11.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	44.57
Cellulosics	0.00
Rubber	0.00
Plastics	4.14
Cements	0.00
Inorganic Matrix	744.45
Organic Matrix	14.88
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.13E+01
Np-237	2.86E-04
Pu-238	1.41E-01
Pu-239	2.87E+00
Pu-240	6.66E-01
Pu-241	1.52E+01
Pu-242	8.68E-05
Th-229	4.89E-13
Th-230	5.67E-09
Th-232	4.39E-18
U-233	3.54E-09
U-234	2.11E-04
U-235	1.71E-05
U-236	5.92E-08
U-238	1.11E-03

Haz. Waste No(s).

D004, D005, D009,
D010, F001, F002,
F005, F006, F007,
F009No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF140.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5420	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RF140.01	4.0
SWB Dir Ld w/o Liner	WP-RF140.01	168.2
Shipped Total		172.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	149.72
Aluminum-based Metals/Alloys	2.38
Other Metals	60.72
Other Inorganic Materials	47.21
Cellulosics	4.14
Rubber	1.58
Plastics	5.57
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.02
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.89E-01
Am-243	7.90E-08
Np-237	2.44E-06
Pu-238	7.81E-02
Pu-239	1.44E+00
Pu-240	3.49E-01
Pu-241	7.90E+00
Pu-242	4.72E-05
Th-229	7.02E-15
Th-230	4.19E-11
Th-232	4.09E-18
U-233	3.84E-11
U-234	1.61E-06
U-235	2.87E-08
U-236	4.14E-08
U-238	2.03E-10

Haz. Waste No(s).

D005, D008, D009,
D011, F001, F002,
F005, F006, F007,
F009No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF141.01-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	WP-RF141.01	45.6
Shipped Total		45.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	7.30
Aluminum-based Metals/Alloys	0.00
Other Metals	8.83
Other Inorganic Materials	14.35
Cellulosics	0.00
Rubber	0.00
Plastics	1.77
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.01
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.79E+00
Np-237	4.52E-06
Pu-238	1.57E+00
Pu-239	3.99E+01
Pu-240	9.35E+00
Pu-241	9.42E+01
Pu-242	6.16E-04
Th-229	4.57E-15
Th-230	2.11E-07
Th-232	1.10E-16
U-233	3.72E-11
U-234	5.86E-03
U-235	1.88E-04
U-236	1.11E-06
U-238	1.66E-06

Haz. Waste No(s).

D006, D007, D008

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RF141.02-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	WP-RF141.02	176.0
Shipped Total		176.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	5.27
Aluminum-based Metals/Alloys	0.01
Other Metals	6.35
Other Inorganic Materials	11.00
Cellulosics	0.00
Rubber	0.00
Plastics	1.27
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.20E+00
Np-237	1.39E-03
Pu-238	1.58E+00
Pu-239	4.22E+01
Pu-240	1.01E+01
Pu-241	8.91E+01
Pu-242	8.65E-04
Th-229	4.40E-12
Th-230	6.00E-08
Th-232	1.18E-16
U-233	2.35E-08
U-234	1.68E-03
U-235	5.36E-05
U-236	1.20E-06
U-238	4.73E-07

Haz. Waste No(s).

D007, D008

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RL105-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	105-C, 105KE, and 105-N Bldg TRU Mixed Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	23.1	0.0	23.1
85-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Box - Misc	89.6	0.0	89.6
Uncontained	17.5	0.0	17.5
Current Form Total	130.9	0.0	130.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	29.3	0.0	29.3
SWB Dir Ld w/ Liner	132.3	0.0	132.3
Final Form Total	161.6	0.0	161.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	561.55
Aluminum-based Metals/Alloys	130.85
Other Metals	0.00
Other Inorganic Materials	32.22
Cellulosics	16.25
Rubber	3.57
Plastics	25.82
Cements	0.00
Inorganic Matrix	4.36
Organic Matrix	0.00
Soils/gravel	1.35
Vitrified	0.00
Packaging Material, Steel	149.38
Packaging Material, Plastic	7.70
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.49E-01
Am-243	7.99E-04
Cm-244	1.46E-02
Cs-137	7.33E-01
Np-237	3.51E-04
Pu-238	5.03E-02
Pu-239	1.26E-01
Pu-240	7.26E-02
Pu-241	7.10E+00
Pu-242	2.59E-05
Sr-90	6.52E-01
Th-229	7.18E-14
Th-230	5.08E-10
Th-232	6.21E-16
U-233	1.53E-09
U-234	5.66E-05
U-235	2.81E-06
U-236	1.26E-05
U-238	7.01E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s) 125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RL105-03**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	NLOP sludge	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	67.2	0.0	67.2
Current Form Total	67.2	0.0	67.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	67.2	0.0	67.2
Final Form Total	67.2	0.0	67.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	36.09
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	12.59
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	1551.03
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.35E-01
Cs-137	1.41E+00
Np-237	7.27E-05
Pu-238	3.88E-02
Pu-239	1.90E-01
Pu-240	1.05E-01
Pu-241	4.89E+00
Pu-242	5.03E-05
Sr-90	2.59E-01
Th-229	1.48E-14
Th-230	3.19E-09
Th-232	7.67E-20
U-233	3.17E-10
U-234	3.55E-04
U-235	1.26E-05
U-236	3.10E-09
U-238	2.68E-04

No Hazardous Waste Numbers Provided

TRUCON Code(s)

111/211

Waste Stream Description

Solidified inorganic CH TRU waste generated from Facility/Equipment Operation and Maintenance activities at the Reactor facility.

Waste Stream ID: **RL105-07**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	105-KE Bldg TRU RH Nonmixed Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	4.8	0.0	4.8
85-gal Drum Dir Ld w/ Liner	0.3	0.0	0.3
Box - Misc	72.5	0.0	72.5
Current Form Total	77.6	0.0	77.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	97.9	0.0	97.9
Final Form Total	97.9	0.0	97.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	549.16
Aluminum-based Metals/Alloys	127.96
Other Metals	0.00
Other Inorganic Materials	31.51
Cellulosics	15.89
Rubber	3.49
Plastics	25.25
Cements	0.00
Inorganic Matrix	4.27
Organic Matrix	0.00
Soils/gravel	1.32
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.75E-02
Am-243	1.19E-07
Cm-244	3.08E-03
Cs-137	2.02E-01
Np-237	2.57E-06
Pu-238	1.64E-02
Pu-239	4.08E-02
Pu-240	2.07E-02
Pu-241	1.09E+00
Pu-242	2.63E-06
Sr-90	1.71E-01
Th-229	2.82E-14
Th-230	1.70E-09
Th-232	1.57E-07
U-233	1.62E-10
U-234	9.44E-05
U-235	4.50E-06
U-236	1.79E-05
U-238	1.10E-04

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters. The waste stream ranges from contaminated clothing to process equipment. The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the REACTOR FACILITY.

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **RL105-09**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	105KE TRU RH mixed solidified inorganics			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
85-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
Uncontained	347.0	0.0	347.0
Current Form Total	347.6	0.0	347.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	348.0	0.0	348.0
Final Form Total	348.0	0.0	348.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	211.78
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	7.90
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	777.38
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.58E-01
Cs-137	4.73E-01
Np-237	2.69E-05
Pu-238	2.03E-02
Pu-239	1.02E-01
Pu-240	5.61E-02
Pu-241	2.25E+00
Pu-242	2.70E-05
Sr-90	1.78E-01
Th-229	1.93E-13
Th-230	9.69E-09
Th-232	8.11E-14
U-233	6.86E-10
U-234	1.80E-04
U-235	6.77E-06
U-236	2.74E-04
U-238	1.46E-04

No Hazardous Waste Numbers Provided

TRUCON Code(s)

311

Waste Stream Description

The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the REACTOR FACILITY.

Waste Stream ID: **RL200-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Misc 200 Area TRU Mixed Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	52.2	0.0	52.2
85-gal Drum Dir Ld w/ Liner	9.0	0.0	9.0
Box - Misc	38.1	0.0	38.1
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Uncontained	26.7	0.0	26.7
Current Form Total	127.9	0.0	127.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	72.6	0.0	72.6
SWB Dir Ld w/ Liner	79.4	0.0	79.4
Final Form Total	152.0	0.0	152.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	571.32
Aluminum-based Metals/Alloys	129.26
Other Metals	0.00
Other Inorganic Materials	33.83
Cellulosics	24.79
Rubber	8.55
Plastics	33.85
Cements	0.00
Inorganic Matrix	5.43
Organic Matrix	0.00
Soils/gravel	2.92
Vitrified	0.00
Packaging Material, Steel	142.66
Packaging Material, Plastic	18.30
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.55E-01
Cs-137	8.53E-04
Np-237	2.10E-07
Pu-238	1.14E-01
Pu-239	4.40E-01
Pu-240	2.48E-01
Pu-241	9.09E+00
Pu-242	1.00E-05
Pu-244	1.74E-12
Th-229	1.42E-17
Th-230	1.47E-12
Th-232	1.82E-19
U-233	4.56E-13
U-234	3.26E-07
U-235	4.34E-10
U-236	7.35E-09
U-238	1.51E-15

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RL200-02**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Soils	Waste Matrix Code	S4000	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Soil arisings from Groundwater project.			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	8.7	0.0	8.7
85-gal Drum Dir Ld w/ Liner	4.5	0.0	4.5
Box - Misc	34.2	0.0	34.2
Current Form Total	47.4	0.0	47.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	12.5	0.0	12.5
SWB Dir Ld w/ Liner	43.5	0.0	43.5
Final Form Total	56.0	0.0	56.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	69.44
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	30.42
Cellulosics	0.00
Rubber	0.00
Plastics	6.61
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	554.87
Vitrified	0.00
Packaging Material, Steel	148.44
Packaging Material, Plastic	9.19
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.15E-01
Cs-137	7.57E-02
Np-237	3.23E-07
Pu-238	3.16E-03
Pu-239	4.94E-02
Pu-240	1.99E-02
Pu-241	5.52E-02
Pu-242	3.51E-06
Sr-90	2.30E-02
Th-229	7.07E-11
Th-230	1.47E-08
Th-232	4.01E-08
U-233	7.53E-07
U-234	2.98E-06
U-235	9.79E-08
U-236	1.44E-07
U-238	2.75E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Crib and soil characterization and remediation wastes

Waste Stream ID: **RL201-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	201C TRU Mixed Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	11.6	0.0	11.6
Current Form Total	11.6	0.0	11.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	11.6	0.0	11.6
Final Form Total	11.6	0.0	11.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	28.57
Other Inorganic Materials	9.47
Cellulosics	66.67
Rubber	123.40
Plastics	33.33
Cements	0.00
Inorganic Matrix	0.96
Organic Matrix	0.00
Soils/gravel	325.10
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.41E+00
Cs-137	1.68E-01
Np-237	1.19E-05
Pu-239	1.59E-01
Pu-240	3.91E-02
Sr-90	4.32E+00
Th-229	1.82E-13
Th-230	1.79E-12
Th-232	6.45E-18
U-233	3.87E-10
U-234	2.66E-08
U-235	2.35E-09
U-236	1.74E-08
U-238	6.29E-04

Haz. Waste No(s).

D007, D010

TRUCON Code(s)

125/225

Waste Stream Description

The waste is generated from Remediation/D&D Waste activities at the PROCESS BUILDING, 3 HOT CELLS (DEMO'D). □ □ THE STREAM CONTAINS PLASTIC/POLYURETHANE, STAINLESS STEEL, PAPER/CARDBOARD, RUBBER, LEAD, CLOTH/RAGS/NYLON.

Waste Stream ID: **RL202S-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	202S TRU Mixed Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	2.74
Aluminum-based Metals/Alloys	0.91
Other Metals	0.77
Other Inorganic Materials	0.00
Cellulosics	3.34
Rubber	0.77
Plastics	53.09
Cements	0.00
Inorganic Matrix	3.59
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.49E-02
Np-237	3.99E-07
Pu-238	3.56E-03
Pu-239	7.33E-02
Pu-240	1.76E-02
Pu-241	1.29E-01
Pu-242	8.11E-07
Th-229	4.16E-15
Th-230	3.03E-12
Th-232	8.27E-19
U-233	1.18E-11
U-234	8.34E-08
U-235	5.78E-10
U-236	4.18E-09
U-238	9.80E-16

Haz. Waste No(s).

D006, D007, D008,
D009

TRUCON Code(s)

125/225

Waste Stream Description

The waste is generated from Remediation/D&D Waste activities at the REDOX CANYON AND SERVICE FACILITY.

Waste Stream ID: **RL209E-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	209E TRU Mixed Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	24.5	0.0	24.5
85-gal Drum Dir Ld w/ Liner	4.2	0.0	4.2
Box - Misc	40.8	0.0	40.8
Current Form Total	69.6	0.0	69.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	31.4	0.0	31.4
SWB Dir Ld w/ Liner	51.0	0.0	51.0
Final Form Total	82.4	0.0	82.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	38.73
Aluminum-based Metals/Alloys	0.00
Other Metals	0.29
Other Inorganic Materials	6.63
Cellulosics	37.90
Rubber	16.01
Plastics	29.29
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	144.85
Packaging Material, Plastic	14.84
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.16E+00
Cs-137	7.65E-09
Np-237	8.36E-05
Pu-238	1.02E+00
Pu-239	8.40E+00
Pu-240	3.06E+00
Pu-241	1.43E+01
Pu-242	4.49E-04
Sr-90	6.85E-09
Th-229	4.32E-12
Th-230	3.40E-08
Th-232	8.10E-16
U-233	5.36E-09
U-234	2.28E-04
U-235	6.33E-06
U-236	1.73E-06
U-238	1.59E-05

Haz. Waste No(s).

D006, D007, D008,
D009, F002, F003,
F005

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RL209E-08**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	209E TRU RH Mixed Debris				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.69
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.56
Cellulosics	16.85
Rubber	2.25
Plastics	15.73
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.07E+00
Np-237	3.86E-05
Pu-238	5.23E-01
Pu-239	3.92E+00
Pu-240	1.37E+00
Pu-241	6.77E+00
Pu-242	1.71E-04
Th-229	1.93E-12
Th-230	2.66E-09
Th-232	3.63E-16
U-233	2.42E-09
U-234	3.04E-05
U-235	7.35E-08
U-236	7.73E-07
U-238	4.90E-13

Haz. Waste No(s).

D006, D007, D018, D019, F002, F003, F005

TRUCON Code(s)

325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RL216Z-02**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Soils	Waste Matrix Code	S4000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	216-Z-9 TRU Mixed Soil	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	72.6	0.0	72.6
85-gal Drum Dir Ld w/ Liner	115.0	0.0	115.0
Box - Misc	12.7	0.0	12.7
Current Form Total	200.3	0.0	200.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	293.7	0.0	293.7
SWB Dir Ld w/ Liner	17.0	0.0	17.0
Final Form Total	310.7	0.0	310.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	52.96
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	23.20
Cellulosics	0.00
Rubber	0.00
Plastics	5.04
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	423.18
Vitrified	0.00
Packaging Material, Steel	132.04
Packaging Material, Plastic	35.04
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.66E+00
Np-237	6.70E-06
Pu-238	1.54E+00
Pu-239	1.05E+01
Pu-240	3.70E+00
Pu-241	9.35E+01
Pu-242	1.78E-04
Th-229	4.58E-15
Th-230	1.79E-10
Th-232	2.44E-17
U-233	4.62E-11
U-234	1.32E-05
U-235	3.12E-08
U-236	3.29E-07
U-238	8.08E-14

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of soil contaminated with TRU solutions. Soil is contained in a 0.3 mm polyethylene bag within an inner container. The outer container is a standard 55-gallon drum. Vermiculite is a packing material between the inner and outer container.

Waste Stream ID: **RL221T-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	221-T TRU Mixed Debris				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	5.2	0.0	5.2
Current Form Total	5.2	0.0	5.2

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	435.40
Aluminum-based Metals/Alloys	68.62
Other Metals	0.00
Other Inorganic Materials	33.92
Cellulosics	82.82
Rubber	35.49
Plastics	84.40
Cements	0.00
Inorganic Matrix	11.83
Organic Matrix	0.00
Soils/gravel	14.20
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.50E-04
Np-237	2.00E-09
Pu-238	6.40E-05
Pu-239	3.16E-04
Pu-240	1.78E-04
Pu-241	1.40E-03
Pu-242	7.20E-09
Th-229	1.14E-16
Th-230	1.06E-12
Th-232	1.43E-19
U-233	1.23E-13
U-234	6.85E-09
U-235	1.03E-11
U-236	1.75E-10
U-238	3.58E-17

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RL221U-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	221U moved from RL200-01	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Box - Misc	0.8	0.0	0.8
Current Form Total	1.0	0.0	1.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Final Form Total	2.1	0.0	2.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	214.60
Aluminum-based Metals/Alloys	29.89
Other Metals	8.98
Other Inorganic Materials	39.85
Cellulosics	22.91
Rubber	5.44
Plastics	20.21
Cements	0.00
Inorganic Matrix	3.79
Organic Matrix	0.01
Soils/gravel	4.02
Vitrified	0.00
Packaging Material, Steel	151.25
Packaging Material, Plastic	4.75
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.42E-04
Cs-137	5.42E-02
Np-237	2.65E-09
Pu-238	2.09E-04
Pu-239	2.84E-04
Pu-240	2.70E-05
Sr-90	2.14E-02
Th-229	6.76E-12
Th-230	6.14E-08
Th-232	3.93E-14
U-233	2.19E-09
U-234	2.07E-04
U-235	6.93E-06
U-236	2.41E-05
U-238	1.52E-04

Haz. Waste No(s).

D006, D007, D008, D009, D011, D027, D030, D032, D033, D034, D036, D037, F001, F002

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RL222S-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	222S TRU Mixed Debris				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	51.0	0.0	51.0
85-gal Drum Dir Ld w/ Liner	15.8	0.0	15.8
Box - Misc	44.4	0.0	44.4
Current Form Total	111.2	0.0	111.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	76.3	0.0	76.3
SWB Dir Ld w/ Liner	56.7	0.0	56.7
Final Form Total	133.0	0.0	133.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	520.79
Aluminum-based Metals/Alloys	103.32
Other Metals	0.01
Other Inorganic Materials	34.67
Cellulosics	52.68
Rubber	20.80
Plastics	58.46
Cements	0.00
Inorganic Matrix	8.69
Organic Matrix	0.00
Soils/gravel	8.40
Vitrified	0.00
Packaging Material, Steel	140.47
Packaging Material, Plastic	21.74
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.56E-01
Am-243	6.33E-07
Cs-137	8.45E-05
Np-237	1.89E-05
Pu-238	8.78E-03
Pu-239	3.58E-02
Pu-240	1.87E-02
Pu-241	6.56E-01
Pu-242	7.63E-07
Sr-90	4.01E-05
Th-229	5.01E-08
Th-230	1.11E-12
Th-232	4.13E-09
U-233	5.34E-04
U-234	1.36E-07
U-235	3.95E-09
U-236	5.56E-10
U-238	1.12E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D030, D039, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters. This waste is generated from Analytical laboratory Waste activities at the CONTROL LABORATORY.

Waste Stream ID: **RL222S-08**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	222S TRU RH Mixed Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.8	0.0	0.8
85-gal Drum Dir Ld w/ Liner	0.3	0.0	0.3
Box - Misc	0.1	0.0	0.1
Current Form Total	1.3	0.0	1.3

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	266.20
Aluminum-based Metals/Alloys	42.03
Other Metals	0.00
Other Inorganic Materials	20.55
Cellulosics	50.50
Rubber	21.55
Plastics	51.72
Cements	0.00
Inorganic Matrix	7.40
Organic Matrix	0.00
Soils/gravel	8.72
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.13E-02
Am-243	7.15E-03
Cs-137	8.80E-02
Np-237	3.27E-03
Pu-238	1.85E-02
Pu-239	1.80E+00
Pu-240	6.07E-02
Pu-241	5.57E+00
Pu-242	1.61E-04
Pu-244	6.53E-07
Sr-90	1.38E-01
Th-229	1.18E-05
Th-230	2.39E-13
Th-232	4.45E-20
U-233	1.26E-01
U-234	5.30E-08
U-235	6.55E-06
U-236	1.80E-09
U-238	1.10E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D030, D039, F001, F002, F003, F004, F005

TRUCON Code(s)

325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters. The waste is generated from Analytical Laboratory Waste activities at the CONTROL LABORATORY.

Waste Stream ID: **RL231Z-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	231-Z TRU Mixed Debris				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	93.2	0.0	93.2
85-gal Drum Dir Ld w/ Liner	50.6	0.0	50.6
Box - Misc	1058.3	0.0	1058.3
Uncontained	56.6	0.0	56.6
Current Form Total	1258.6	0.0	1258.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	156.2	0.0	156.2
SWB Dir Ld w/ Liner	1379.7	0.0	1379.7
Final Form Total	1535.9	0.0	1535.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	160.87
Aluminum-based Metals/Alloys	0.00
Other Metals	0.92
Other Inorganic Materials	8.05
Cellulosics	18.86
Rubber	4.78
Plastics	19.68
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	151.19
Packaging Material, Plastic	4.84
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.06E-01
Am-243	3.67E-06
Cs-137	3.29E-05
Np-237	1.76E-05
Pu-238	4.46E-02
Pu-239	4.22E-01
Pu-240	1.13E-01
Pu-241	7.50E-01
Pu-242	1.38E-05
Sr-90	2.96E-05
Th-229	6.74E-13
Th-230	8.06E-09
Th-232	1.62E-17
U-233	1.04E-09
U-234	6.49E-05
U-235	1.68E-06
U-236	4.69E-08
U-238	1.05E-05

Haz. Waste No(s).

D006, D007, D008, D009, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters. The waste is generated from R&D/R&D Laboratory Waste activities at the MATERIALS ENGINEERING LABORATORY.

Waste Stream ID: **RL231Z-03**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	231Z TRU Mixed Solid Inorganic			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
85-gal Drum Dir Ld w/ Liner	1.6	0.0	1.6
Current Form Total	1.6	0.0	1.6

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	78.74
Other Inorganic Materials	0.14
Cellulosics	4.93
Rubber	1.17
Plastics	15.44
Cements	0.00
Inorganic Matrix	70.03
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.90E-04
Np-237	2.35E-09
Pu-238	3.77E-05
Pu-239	1.79E-04
Pu-240	1.01E-04
Pu-241	1.01E-03
Pu-242	4.07E-09
Th-229	1.15E-16
Th-230	4.38E-13
Th-232	5.80E-20
U-233	1.35E-13
U-234	3.35E-09
U-235	4.94E-12
U-236	8.38E-11
U-238	1.72E-17

Haz. Waste No(s).

D006, D007, D008,
D009, D019, F001,
F002, F003, F005

TRUCON Code(s)

122/222

Waste Stream Description

The waste is generated from R&D/R&D Laboratory Waste activities at the 231Z MATERIALS ENGINEERING LABORATORY.

Waste Stream ID: **RL233S-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	233S TRU Mixed Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	5.6	0.0	5.6
85-gal Drum Dir Ld w/ Liner	10.9	0.0	10.9
SWB Dir Ld w/ Liner	52.9	0.0	52.9
Current Form Total	69.5	0.0	69.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	14.8	0.0	14.8
SWB Dir Ld w/ Liner	52.9	0.0	52.9
Final Form Total	67.7	0.0	67.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	229.46
Aluminum-based Metals/Alloys	0.96
Other Metals	2.12
Other Inorganic Materials	5.23
Cellulosics	15.60
Rubber	3.31
Plastics	18.36
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.61
Vitrified	0.00
Packaging Material, Steel	148.55
Packaging Material, Plastic	9.01
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.24E-01
Cs-137	4.60E-05
Np-237	2.21E-04
Pu-238	1.03E-01
Pu-239	7.87E-01
Pu-240	2.56E-01
Pu-241	2.29E+00
Pu-242	7.57E-05
Sr-90	4.18E-05
Th-229	4.06E-13
Th-230	1.24E-10
Th-232	1.68E-18
U-233	2.89E-09
U-234	5.03E-06
U-235	1.41E-07
U-236	2.27E-08
U-238	2.08E-06

Haz. Waste No(s).

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

TRUCON Code(s)

122/222

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters. The waste is generated from Remediation/D&D Waste activities at the PLUTONIUM CONCENTRATION FACILITY.

Waste Stream ID: **RL233S-03**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	233S solidified inorganic waste			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	4.6	0.0	4.6
Current Form Total	4.6	0.0	4.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	4.8	0.0	4.8
Final Form Total	4.8	0.0	4.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.04
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	616.46
Cellulosics	0.00
Rubber	0.04
Plastics	0.74
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.17E-02
Cs-137	1.41E-06
Np-237	6.86E-05
Pu-238	2.48E-02
Pu-239	8.60E-02
Pu-240	3.63E-02
Pu-241	1.70E-01
Pu-242	2.98E-05
Sr-90	1.28E-06

Haz. Waste No(s).

D004, D006, D007,
D008, D009, D010,
D011

TRUCON Code(s)

122/222

Waste Stream Description

Solidified inorganic CH TRU waste generated from Facility/Equipment Operation and Maintenance activities

Waste Stream ID: **RL2718-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	2714U and 2718E TRU Mixed Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.01
Aluminum-based Metals/Alloys	0.00
Other Metals	42.56
Other Inorganic Materials	84.06
Cellulosics	6.79
Rubber	9.17
Plastics	13.59
Cements	0.00
Inorganic Matrix	7.71
Organic Matrix	0.00
Soils/gravel	33.72
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.17E+00
Np-237	5.77E-06
Pu-238	1.77E-01
Pu-239	8.55E-01
Pu-240	4.77E-01
Pu-241	7.37E+00
Pu-242	1.75E-05
Th-229	1.05E-13
Th-230	7.13E-10
Th-232	1.01E-16
U-233	2.03E-10
U-234	9.11E-06
U-235	1.43E-08
U-236	2.41E-07
U-238	4.49E-14

Haz. Waste No(s).

D006, D007, D018,
D019, F002, F003,
F005

TRUCON Code(s)

125/225

Waste Stream Description

The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the WAREHOUSE and CRITICAL MASS STORAGE.

Waste Stream ID: **RL300-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	300 Area TRU Mixed Debris				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	48.9	0.0	48.9
85-gal Drum Dir Ld w/ Liner	31.9	0.0	31.9
Box - Misc	86.6	0.0	86.6
SWB Dir Ld w/ Liner	3.8	0.0	3.8
Current Form Total	171.1	0.0	171.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	81.3	0.0	81.3
SWB Dir Ld w/ Liner	113.4	0.0	113.4
Final Form Total	194.7	0.0	194.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	67.17
Aluminum-based Metals/Alloys	0.24
Other Metals	12.37
Other Inorganic Materials	39.12
Cellulosics	21.39
Rubber	5.32
Plastics	36.50
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	144.02
Packaging Material, Plastic	16.15
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.02E+00
Am-243	3.15E-05
Cs-137	1.25E-06
Np-237	4.11E-05
Pu-238	5.49E-01
Pu-239	2.90E+00
Pu-240	1.33E+00
Pu-241	1.93E+01
Pu-242	2.53E-04
Sr-90	1.14E-06
Th-229	8.31E-15
Th-230	5.53E-09
Th-232	2.03E-06
U-233	1.78E-10
U-234	6.16E-04
U-235	3.14E-05
U-236	3.94E-08
U-238	5.64E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D034, D035, D037, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high efficiency particulate air filters. The waste is generated from Facility/Equipment Operation and Maintenance waste activities at the WASTE NEUTRALIZATION FACILITY.

Waste Stream ID: **RL300-03**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	300 area solidified inorganics			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1.7	0.0	1.7
85-gal Drum Dir Ld w/ Liner	0.3	0.0	0.3
Current Form Total	2.0	0.0	2.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.1	0.0	2.1
Final Form Total	2.1	0.0	2.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	2.74
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	537.43
Cellulosics	0.00
Rubber	0.00
Plastics	28.56
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.47E+00
Np-237	1.76E-05
Pu-238	8.62E-01
Pu-239	4.68E+00
Pu-240	2.46E+00
Pu-241	3.31E+01
Pu-242	4.52E-04
U-234	5.69E-05
U-235	1.90E-06
U-238	2.86E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D034, D037, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

122/222

Waste Stream Description

Solidified inorganic CH TRU waste generated from Facility/Equipment Operation and Maintenance activities

Waste Stream ID: **RL308-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	308 TRU Mixed Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	23.9	0.0	23.9
85-gal Drum Dir Ld w/ Liner	5.2	0.0	5.2
Box - Misc	456.3	0.0	456.3
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Current Form Total	487.2	0.0	487.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	31.6	0.0	31.6
SWB Dir Ld w/ Liner	572.7	0.0	572.7
Final Form Total	604.3	0.0	604.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	106.54
Aluminum-based Metals/Alloys	0.22
Other Metals	15.69
Other Inorganic Materials	18.19
Cellulosics	19.28
Rubber	6.07
Plastics	40.40
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	152.31
Packaging Material, Plastic	3.07
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.44E+01
Am-243	3.01E-06
Cs-137	3.30E-04
Np-237	5.90E-06
Pu-238	1.05E+01
Pu-239	1.65E+01
Pu-240	1.07E+01
Pu-241	2.34E+02
Pu-242	1.02E-02
Sr-90	3.00E-04
Th-232	9.71E-07
U-233	1.31E-04
U-234	2.34E-04
U-235	2.42E-05
U-238	3.54E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D030, D034, D037, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high efficiency particulate air filters. The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the FUELS DEVELOPMENT LABORATORY.

Waste Stream ID: **RL325-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	325 TRU Mixed Debris				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	566.0	0.0	566.0
85-gal Drum Dir Ld w/ Liner	314.9	0.0	314.9
Box - Misc	292.9	0.0	292.9
SWB Dir Ld w/ Liner	15.1	0.0	15.1
Uncontained	51.5	0.0	51.5
Current Form Total	1240.4	0.0	1240.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	938.7	0.0	938.7
SWB Dir Ld w/ Liner	434.7	0.0	434.7
Final Form Total	1373.4	0.0	1373.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	87.62
Aluminum-based Metals/Alloys	0.20
Other Metals	4.09
Other Inorganic Materials	39.86
Cellulosics	15.42
Rubber	6.00
Plastics	30.27
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.95
Vitrified	0.00
Packaging Material, Steel	137.98
Packaging Material, Plastic	25.67
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.81E+00
Am-243	4.77E-04
Cm-244	9.48E-03
Cs-137	1.11E-03
Np-237	2.05E-04
Pu-238	8.79E-01
Pu-239	1.71E+00
Pu-240	7.04E-01
Pu-241	1.35E+01
Pu-242	2.05E-04
Sr-90	1.12E-03
Th-232	2.32E-06
U-233	3.99E-05
U-234	3.08E-04
U-235	1.06E-05
U-238	1.10E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D033, D034, D035, D036, D037, D038, D039, D040, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

The waste is generated from R&D/R&D Laboratory Waste activities at the CESIUM RECOVERY FAC and the RADIOCHEMISTRY BUILDING.

Waste Stream ID: **RL325-03**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	325 TRU Mixed Solid Inorganic				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

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

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	4.4	0.0	4.4
Final Form Total	4.4	0.0	4.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	32.93
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	473.71
Cellulosics	1.93
Rubber	2.90
Plastics	16.95
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	126.71
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.52E+00
Cs-137	2.21E-04
Np-237	4.94E-04
Pu-238	1.88E-01
Pu-239	1.88E+00
Pu-240	5.66E-01
Pu-241	1.07E+01
Pu-242	5.62E-05
Sr-90	2.00E-04
Th-229	1.01E-13
Th-230	3.98E-09
Th-232	4.14E-19
U-233	2.15E-09
U-234	4.43E-04
U-235	1.47E-05
U-236	1.68E-08
U-238	2.13E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D033, D034, D036, D038, D039, D040, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

122/222

Waste Stream Description

The waste is generated from R&D/R&D Laboratory Waste activities at the RADIOCHEMISTRY BUILDING.

Waste Stream ID: **RL325-08**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	325 TRU RH Mixed Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	24.1	0.0	24.1
85-gal Drum Dir Ld w/ Liner	2.6	0.0	2.6
Box - Misc	94.5	0.0	94.5
SWB Dir Ld w/ Liner	28.4	0.0	28.4
Uncontained	37.8	0.0	37.8
Current Form Total	187.3	0.0	187.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	224.3	0.0	224.3
Final Form Total	224.3	0.0	224.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	416.29
Aluminum-based Metals/Alloys	0.00
Other Metals	0.48
Other Inorganic Materials	217.76
Cellulosics	9.31
Rubber	2.00
Plastics	17.07
Cements	0.00
Inorganic Matrix	2.75
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.41E+00
Am-243	2.02E-03
Cm-244	3.69E-01
Cs-137	3.21E+00
Np-237	1.40E-03
Pu-238	2.24E+00
Pu-239	2.98E-01
Pu-240	3.13E-01
Pu-241	2.18E+01
Pu-242	4.26E-04
Sr-90	2.36E+01
Th-229	2.82E-10
Th-230	1.07E-09
Th-232	7.87E-10
U-233	1.63E-07
U-234	3.93E-05
U-235	5.14E-06
U-236	5.89E-08
U-238	1.57E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D033, D034, D036, D037, D038, D039, D040, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters. The waste is generated from R&D/R&D Laboratory Waste activities at the RADIOCHEMISTRY BUILDING.

Waste Stream ID: **RL325-09**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	RH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	325 TRU RH mixed solidified inorganics			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	67.42
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	572.25
Cellulosics	0.00
Rubber	0.00
Plastics	13.48
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.50E-02
Am-243	2.08E-05
Cm-244	9.58E-01
Cs-137	5.66E-02
Pu-238	1.89E-03
Pu-239	3.20E-04
Pu-240	4.97E-04
Pu-241	6.65E-02
Pu-242	2.25E-08
Sr-90	1.43E-01
U-235	1.12E-10
U-238	5.62E-08

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D033, D034, D036, D037, D038, D039, D040, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

322

Waste Stream Description

The waste is generated from R&D/R&D Laboratory Waste activities at the RADIOCHEMISTRY BUILDING.

Waste Stream ID: **RLARG-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Argonne Nat Lab TRU Mixed Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	4.2	0.0	4.2
85-gal Drum Dir Ld w/ Liner	0.3	0.0	0.3
Current Form Total	4.5	0.0	4.5

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	478.23
Aluminum-based Metals/Alloys	64.88
Other Metals	7.99
Other Inorganic Materials	32.07
Cellulosics	78.30
Rubber	33.56
Plastics	79.80
Cements	0.00
Inorganic Matrix	21.13
Organic Matrix	0.00
Soils/gravel	13.42
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.22E+00
Np-237	2.05E-05
Pu-238	4.51E-01
Pu-239	2.04E+00
Pu-240	1.15E+00
Pu-241	1.54E+01
Pu-242	4.64E-05
Th-229	3.97E-04
Th-230	3.13E-09
Th-232	1.17E-04
U-233	1.92E-01
U-234	3.08E-05
U-235	4.42E-08
U-236	7.51E-07
U-238	1.54E-13

Haz. Waste No(s).

D006, D007, D008

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters. The waste is generated from R&D/R&D Laboratory Waste activities at the Argonne National Laboratory - East (IL).

Waste Stream ID: **RLBART-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Bartlesville TRU Mixed Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	375.08
Aluminum-based Metals/Alloys	59.12
Other Metals	0.00
Other Inorganic Materials	29.22
Cellulosics	71.35
Rubber	30.58
Plastics	72.71
Cements	0.00
Inorganic Matrix	10.19
Organic Matrix	0.00
Soils/gravel	12.23
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.85E-06
Np-237	2.49E-11
Pu-241	5.98E-05
Th-229	6.65E-19
U-233	1.03E-15

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RLBART-08**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Bartlesville RH-TRU Mixed Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	177.41
Aluminum-based Metals/Alloys	28.01
Other Metals	0.00
Other Inorganic Materials	13.70
Cellulosics	33.66
Rubber	14.36
Plastics	34.47
Cements	0.00
Inorganic Matrix	4.93
Organic Matrix	0.00
Soils/gravel	5.81
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.05E-01
Np-237	4.34E-06
Pu-238	4.96E-07
Pu-239	3.80E-06
Pu-240	1.84E-06
Pu-241	6.04E-06
Pu-242	5.31E-10
Th-229	2.02E-13
Th-230	4.91E-15
Th-232	9.11E-22
U-233	2.47E-10
U-234	4.06E-11
U-235	9.74E-14
U-236	1.42E-12
U-238	2.08E-18

No Hazardous Waste Numbers Provided

TRUCON Code(s)
325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RLBAT-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Battelle Columbus TRU Mixed Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	7.3	0.0	7.3
85-gal Drum Dir Ld w/ Liner	11.3	0.0	11.3
Box - Misc	20.4	0.0	20.4
Current Form Total	38.9	0.0	38.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	18.3	0.0	18.3
SWB Dir Ld w/ Liner	26.5	0.0	26.5
Final Form Total	44.8	0.0	44.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	561.11
Aluminum-based Metals/Alloys	118.24
Other Metals	0.00
Other Inorganic Materials	35.60
Cellulosics	42.97
Rubber	16.03
Plastics	50.31
Cements	0.00
Inorganic Matrix	7.58
Organic Matrix	0.00
Soils/gravel	6.35
Vitrified	0.00
Packaging Material, Steel	144.22
Packaging Material, Plastic	15.84
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.90E-01
Am-243	7.69E-08
Cs-137	5.31E-08
Np-237	2.59E-05
Pu-238	2.15E+00
Pu-239	1.86E-01
Pu-240	1.05E-01
Pu-241	1.54E+00
Pu-242	4.52E-06
Sr-90	4.86E-08
Th-229	2.01E-12
Th-230	2.66E-08
Th-232	1.06E-07
U-233	2.17E-09
U-234	2.13E-04
U-235	2.65E-06
U-236	6.25E-08
U-238	8.73E-06

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RLBAT-08**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	BATCO TRU RH Mixed Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	4.2	0.0	4.2
Box - Misc	0.6	0.0	0.6
Current Form Total	4.7	0.0	4.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	6.2	0.0	6.2
Final Form Total	6.2	0.0	6.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1046.51
Aluminum-based Metals/Alloys	0.00
Other Metals	9.35
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.89E-01
Am-243	4.61E-03
Cm-244	4.13E-01
Cs-137	1.11E+01
Np-237	1.06E-06
Pu-238	5.76E-01
Pu-239	7.69E-02
Pu-240	1.26E-01
Pu-241	7.93E+00
Pu-242	3.35E-04
Sr-90	7.23E+00
Th-229	9.59E-13
Th-230	3.14E-09
Th-232	3.13E-15
U-233	2.05E-09
U-234	7.39E-05
U-235	3.04E-06
U-236	1.27E-05
U-238	5.89E-05

Haz. Waste No(s).

D006, D008, P015

TRUCON Code(s)

325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RLBET-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Bettis TRU Mixed Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	278.65
Aluminum-based Metals/Alloys	43.92
Other Metals	0.00
Other Inorganic Materials	21.71
Cellulosics	53.00
Rubber	22.72
Plastics	54.01
Cements	0.00
Inorganic Matrix	7.57
Organic Matrix	0.00
Soils/gravel	9.09
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.15E-02
Cs-137	1.98E-04
Np-237	5.09E-08
Pu-238	5.29E-03
Pu-239	2.42E-02
Pu-240	1.36E-02
Pu-241	1.73E-01
Pu-242	5.45E-07
Th-229	1.05E-15
Th-230	4.03E-11
Th-232	5.29E-18
U-233	1.85E-12
U-234	3.78E-07
U-235	1.92E-05
U-236	9.31E-09
U-238	1.89E-15

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RLBW-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Babcock Wilcox TRU Mixed Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	113.8	0.0	113.8
85-gal Drum Dir Ld w/ Liner	154.2	0.0	154.2
Box - Misc	127.0	0.0	127.0
Current Form Total	395.0	0.0	395.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	244.6	0.0	244.6
SWB Dir Ld w/ Liner	160.7	0.0	160.7
Final Form Total	405.3	0.0	405.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	65.20
Aluminum-based Metals/Alloys	0.30
Other Metals	7.56
Other Inorganic Materials	48.42
Cellulosics	25.83
Rubber	6.38
Plastics	28.52
Cements	0.00
Inorganic Matrix	1.70
Organic Matrix	0.27
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	139.80
Packaging Material, Plastic	22.81
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.68E+00
Am-243	1.19E-07
Cs-137	4.89E-04
Np-237	1.08E-05
Pu-238	4.08E-01
Pu-239	2.27E+00
Pu-240	1.08E+00
Pu-241	1.60E+01
Pu-242	1.93E-04
Sr-90	4.44E-04
U-233	1.83E-04
U-234	4.89E-05
U-235	1.29E-06
U-238	2.91E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D030, D035, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RLBW-03**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3000	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Babcock & Wilcox solidified inorganics			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	3.65
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	520.96
Cellulosics	0.00
Rubber	0.00
Plastics	14.61
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.28E+00
Cs-137	8.83E-07
Np-237	2.42E-05
Pu-238	8.74E-01
Pu-239	3.59E+00
Pu-240	1.95E+00
Pu-241	2.99E+01
Pu-242	3.91E-04
Sr-90	8.19E-07
U-234	1.07E-04
U-235	3.59E-06
U-238	5.37E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D030, D035, F001, F002, F003, F005

TRUCON Code(s)

122/222

Waste Stream Description

Solidified inorganic CH TRU waste generated from Facility/Equipment Operation and Maintenance activities

Waste Stream ID: **RLBW-08**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Babcock Wilcox TRU RH Mixed Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
85-gal Drum Dir Ld w/ Liner	0.3	0.0	0.3
Current Form Total	0.5	0.0	0.5

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	2.86
Aluminum-based Metals/Alloys	0.00
Other Metals	0.14
Other Inorganic Materials	1.43
Cellulosics	19.17
Rubber	0.21
Plastics	12.88
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.73E+00
Np-237	1.75E-05
Pu-238	4.19E-01
Pu-239	8.23E-01
Pu-240	4.94E-01
Pu-241	6.15E+00
Pu-242	2.52E-04
U-234	1.97E-05
U-235	4.92E-07
U-238	1.05E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D030, D035, F001, F002, F003, F005

TRUCON Code(s)

325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

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

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RLCBWD.001	2.9
55-gal Drum Dir Ld w/o Liner	WP-RLCBWD.001	28.3
TDOP w/ 10 - 55-gal Drums w/o Liners	WP-RLCBWD.001	40.5
Shipped Total		71.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	45.44
Aluminum-based Metals/Alloys	0.19
Other Metals	2.30
Other Inorganic Materials	40.69
Cellulosics	18.88
Rubber	4.12
Plastics	21.99
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.35E+00
Cs-137	4.49E-06
Np-237	9.92E-06
Pu-238	3.33E-01
Pu-239	1.78E+00
Pu-240	8.51E-01
Pu-241	1.24E+01
Pu-242	1.48E-04
Sr-90	4.08E-06
Th-229	2.30E-08
Th-230	3.53E-10
Th-232	6.23E-19
U-233	2.45E-04
U-234	3.97E-05
U-235	1.12E-06
U-236	2.52E-08
U-238	2.08E-05

Haz. Waste No(s).

D005, D006, D007,
D008, D009, D011,
F001, F002, F003,
F005

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **RLCFF-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Kerr McGee TRU Mixed Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	7.5	0.0	7.5
85-gal Drum Dir Ld w/ Liner	2.9	0.0	2.9
Current Form Total	10.4	0.0	10.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	10.8	0.0	10.8
Final Form Total	10.8	0.0	10.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	405.85
Aluminum-based Metals/Alloys	1.89
Other Metals	0.84
Other Inorganic Materials	40.85
Cellulosics	45.36
Rubber	9.83
Plastics	64.02
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.10
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.53E+00
Cs-137	7.25E-08
Np-237	3.08E-07
Pu-238	3.15E-01
Pu-239	1.89E+00
Pu-240	9.59E-01
Pu-241	1.40E+01
Pu-242	1.55E-04
Sr-90	6.59E-08
Th-232	4.14E-09
U-234	1.21E-05
U-235	4.25E-07
U-238	1.14E-05

Haz. Waste No(s).

D007, D008, D009,
F001, F002, F003,
F005

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters. This waste is generated from R&D/R&D Laboratory Waste activities at the Kerr McGee.

Waste Stream ID: **RLCFF-03**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Kerr McGee TRU Mixed Solid Inorganic			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	4.8	0.0	4.8
Current Form Total	4.8	0.0	4.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	5.0	0.0	5.0
Final Form Total	5.0	0.0	5.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	30.94
Aluminum-based Metals/Alloys	0.00
Other Metals	0.28
Other Inorganic Materials	448.16
Cellulosics	11.02
Rubber	2.39
Plastics	37.52
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.30E+00
Np-237	8.01E-06
Pu-238	1.94E-01
Pu-239	1.44E+00
Pu-240	7.07E-01
Pu-241	3.86E+00
Pu-242	8.97E-05
Th-229	2.09E-13
Th-230	2.98E-09
Th-232	2.07E-16
U-233	3.39E-10
U-234	2.24E-05
U-235	4.86E-07
U-236	4.19E-07
U-238	9.82E-06

Haz. Waste No(s).

D007, D008, D009,
F001, F002, F003,
F005

TRUCON Code(s)

122/222

Waste Stream Description

The waste is generated from R&D/R&D Laboratory Waste activities at the Kerr McGee.

Waste Stream ID: RLCFFD.001-S

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RLCFFD.001	199.5
55-gal Drum Dir Ld w/o Liner	WP-RLCFFD.001	11.2
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-RLCFFD.001	63.0
Shipped Total		273.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	374.37
Aluminum-based Metals/Alloys	1.89
Other Metals	0.38
Other Inorganic Materials	37.57
Cellulosics	42.11
Rubber	8.95
Plastics	59.31
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.06
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.81E+00
Cs-137	6.84E-08
Np-237	1.47E-06
Pu-238	3.57E-01
Pu-239	2.19E+00
Pu-240	1.11E+00
Pu-241	1.48E+01
Pu-242	1.70E-04
Sr-90	6.21E-08
Th-229	5.67E-16
Th-230	2.84E-10
Th-232	4.77E-09
U-233	7.73E-12
U-234	1.68E-05
U-235	4.93E-07
U-236	6.57E-08
U-238	1.09E-05

Haz. Waste No(s).

D007, D008, D009,
F001, F002, F003,
F005No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RLCH2-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Tank Farms TRU Mixed Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	67.95
Aluminum-based Metals/Alloys	0.00
Other Metals	60.07
Other Inorganic Materials	34.97
Cellulosics	5.08
Rubber	0.03
Plastics	6.01
Cements	0.00
Inorganic Matrix	0.01
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.65E-02
Np-237	9.08E-08
Th-229	2.19E-16
U-233	1.17E-12

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D033, D034, D035, D036, D037, D038, D039, D040, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: RLESG-01

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Energy Systems Group TRU Mixed Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	22.3	0.0	22.3
85-gal Drum Dir Ld w/ Liner	10.0	0.0	10.0
Box - Misc	14.9	0.0	14.9
Current Form Total	47.1	0.0	47.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	31.0	0.0	31.0
SWB Dir Ld w/ Liner	18.9	0.0	18.9
Final Form Total	49.9	0.0	49.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	245.70
Aluminum-based Metals/Alloys	0.70
Other Metals	8.17
Other Inorganic Materials	31.89
Cellulosics	30.63
Rubber	19.92
Plastics	39.86
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	139.40
Packaging Material, Plastic	23.44
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.27E-01
Cs-137	2.34E-03
Np-237	8.02E-06
Pu-238	1.16E-01
Pu-239	7.26E-01
Pu-240	3.30E-01
Pu-241	4.23E+00
Pu-242	6.17E-05
Sr-90	1.83E-03
Th-229	3.57E-14
Th-230	5.18E-08
Th-232	2.78E-07
U-233	1.57E-10
U-234	1.15E-03
U-235	2.94E-05
U-236	4.89E-08
U-238	2.87E-05

Haz. Waste No(s).

D006, D007, D008,
F001, F002, F003

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters. The waste is generated from R&D/R&D Laboratory Waste activities at the Rockwell International, Energy Systems Group (CA).

Waste Stream ID: RLESG-08

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Energy Systems Group RH TRU Mixed Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	12.9	0.0	12.9
85-gal Drum Dir Ld w/ Liner	9.7	0.0	9.7
Current Form Total	22.6	0.0	22.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	29.4	0.0	29.4
Final Form Total	29.4	0.0	29.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	5.79
Aluminum-based Metals/Alloys	0.00
Other Metals	27.57
Other Inorganic Materials	2.61
Cellulosics	69.01
Rubber	8.18
Plastics	35.71
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.38E-01
Cs-137	5.07E-02
Np-237	2.12E-07
Pu-238	2.40E-02
Pu-239	1.08E-01
Pu-240	5.76E-02
Pu-241	1.68E+00
Pu-242	2.17E-06
Sr-90	8.58E-04
Th-229	3.44E-16
Th-230	7.84E-12
Th-232	1.06E-18
U-233	2.22E-12
U-234	3.47E-07
U-235	5.33E-10
U-236	8.54E-09
U-238	1.64E-15

Haz. Waste No(s).

D006, D007, D008, F001, F002, F003

TRUCON Code(s)

325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters. The waste is generated from R&D/R&D Laboratory Waste activities at the Rockwell International, Energy Systems Group (CA).

Waste Stream ID: **RLEXX-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Exxon TRU Mixed Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	41.8	0.0	41.8
85-gal Drum Dir Ld w/ Liner	1.9	0.0	1.9
Current Form Total	43.7	0.0	43.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	43.5	0.0	43.5
Final Form Total	43.5	0.0	43.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	61.67
Aluminum-based Metals/Alloys	0.00
Other Metals	33.01
Other Inorganic Materials	109.48
Cellulosics	5.84
Rubber	0.12
Plastics	4.64
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.39E+02
Am-243	7.55E-07
Cs-137	1.01E-07
Np-237	1.10E-03
Pu-238	2.32E+01
Pu-239	3.98E+01
Pu-240	3.53E+01
Pu-241	1.93E+02
Pu-242	3.69E-02
Sr-90	9.21E-08
Th-229	4.58E-11
Th-230	2.12E-07
Th-232	1.62E-14
U-233	5.90E-08
U-234	1.82E-03
U-235	1.01E-06
U-236	2.62E-05
U-238	3.61E-07

Haz. Waste No(s).

D006, D007, D008, D011

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RLGEV-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	GE San Jose and Vallecitos TRU Mixed Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	21.8	0.0	21.8
85-gal Drum Dir Ld w/ Liner	14.5	0.0	14.5
Box - Misc	274.5	0.0	274.5
Current Form Total	310.9	0.0	310.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	35.4	0.0	35.4
SWB Dir Ld w/ Liner	344.0	0.0	344.0
Final Form Total	379.3	0.0	379.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	226.52
Aluminum-based Metals/Alloys	0.23
Other Metals	5.62
Other Inorganic Materials	21.99
Cellulosics	19.30
Rubber	4.67
Plastics	50.56
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	151.38
Packaging Material, Plastic	4.54
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.26E-01
Cs-137	7.72E-08
Np-237	5.60E-06
Pu-238	9.34E-02
Pu-239	5.85E-01
Pu-240	2.52E-01
Pu-241	1.42E+00
Pu-242	4.01E-05
Sr-90	6.91E-08
Th-229	3.50E-13
Th-230	5.34E-08
Th-232	1.07E-16
U-233	3.78E-10
U-234	2.51E-04
U-235	6.12E-06
U-236	1.80E-07
U-238	1.39E-04

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RLGEV-08**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	GE San Jose and Vallecitos TRU RH Mixed Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Misc	5.3	0.0	5.3
Current Form Total	5.3	0.0	5.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	7.1	0.0	7.1
Final Form Total	7.1	0.0	7.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	744.80
Aluminum-based Metals/Alloys	117.60
Other Metals	0.00
Other Inorganic Materials	57.50
Cellulosics	141.30
Rubber	60.30
Plastics	144.70
Cements	0.00
Inorganic Matrix	20.70
Organic Matrix	0.00
Soils/gravel	24.40
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.01E+00
Cs-137	1.45E+00
Np-237	9.38E-06
Pu-238	1.21E+00
Pu-239	6.35E+00
Pu-240	3.13E+00
Pu-241	2.84E+01
Pu-242	3.16E-04
Sr-90	1.12E+00
Th-229	2.11E-13
Th-230	1.01E-08
Th-232	1.32E-15
U-233	3.56E-10
U-234	9.06E-05
U-235	1.50E-07
U-236	2.23E-06
U-238	1.14E-12

Haz. Waste No(s).

D006, D007, D008,
D009, D011, F002,
F003, F005

TRUCON Code(s)

325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RLHAN-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Trench Designation waste stream			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	38.1	0.0	38.1
85-gal Drum Dir Ld w/ Liner	81.1	0.0	81.1
Box - Misc	32.9	0.0	32.9
Current Form Total	152.1	0.0	152.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	113.2	0.0	113.2
SWB Dir Ld w/ Liner	41.6	0.0	41.6
Final Form Total	154.7	0.0	154.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	441.50
Aluminum-based Metals/Alloys	61.49
Other Metals	18.48
Other Inorganic Materials	81.99
Cellulosics	47.14
Rubber	11.19
Plastics	41.58
Cements	0.00
Inorganic Matrix	7.80
Organic Matrix	0.02
Soils/gravel	8.28
Vitrified	0.00
Packaging Material, Steel	136.90
Packaging Material, Plastic	27.38
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.34E-01
Am-243	2.35E-06
Cs-137	1.99E-04
Np-237	1.25E-05
Pu-238	1.70E-01
Pu-239	6.63E-01
Pu-240	3.55E-01
Pu-241	9.80E+00
Pu-242	1.56E-05
Sr-90	1.84E-04
Th-229	5.33E-08
Th-230	1.06E-09
Th-232	1.09E-06
U-233	9.47E-05
U-234	2.12E-05
U-235	6.11E-07
U-236	6.32E-08
U-238	8.00E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Typically, 70 to 80% of waste in drums is combustible items such as wood, plastics, paper, absorbents, rubber, rags. Approximately 20 to 30 % of waste in drums is noncombustible waste, such as failed machinery, tools, glass, concrete, plumbing, fixtures. Waste generated from retrieval operations that cannot be identified or assigned to an original generator.

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

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5120	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	WP-RLHMOX.001	182.6
55-gal POC - 12" w/o Liner	WP-RLHMOX.001	11.2
Shipped Total		193.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	17.10
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.64E+01
Am-243	2.22E-06
Cs-137	3.20E-06
Np-237	2.13E-03
Pu-238	8.67E+00
Pu-239	4.00E+01
Pu-240	2.03E+01
Pu-241	3.07E+02
Pu-242	1.01E-02
Sr-90	2.87E-06
Th-229	6.66E-12
Th-230	1.41E-07
Th-232	2.38E-16
U-233	3.57E-08
U-234	3.98E-03
U-235	2.50E-04
U-236	2.40E-06
U-238	3.07E-03

Haz. Waste No(s).

D005, D006, D007,
D008, D011No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RLIAEA-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	International Atomic Energy Agency TRU Mixed Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	552.00
Aluminum-based Metals/Alloys	87.00
Other Metals	0.00
Other Inorganic Materials	43.00
Cellulosics	105.00
Rubber	45.00
Plastics	107.00
Cements	0.00
Inorganic Matrix	15.00
Organic Matrix	0.00
Soils/gravel	18.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.81E+00
Cs-137	2.05E-04
Np-237	5.72E-05
Pu-238	2.15E+00
Pu-239	1.08E+00
Pu-240	1.40E+00
Pu-241	1.10E+01
Pu-242	2.06E-03
Th-229	3.64E-12
Th-230	1.35E-08
Th-232	4.53E-16
U-233	4.07E-09
U-234	1.39E-04
U-235	2.24E-08
U-236	8.72E-07
U-238	6.52E-12

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: RLM233SD.001-S

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RLM233SD.001	0.6
55-gal Drum Dir Ld w/o Liner	WP-RLM233SD.001	14.8
SWB Dir Ld w/o Liner	WP-RLM233SD.001	1.9
Shipped Total		17.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	391.83
Aluminum-based Metals/Alloys	1.62
Other Metals	0.08
Other Inorganic Materials	83.53
Cellulosics	10.94
Rubber	1.70
Plastics	28.44
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	2.03
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.17E-01
Cs-137	1.48E-05
Np-237	2.36E-04
Pu-238	7.78E-02
Pu-239	6.83E-01
Pu-240	1.93E-01
Pu-241	1.69E+00
Pu-242	4.60E-05
Sr-90	1.35E-05
Th-229	4.83E-14
Th-230	1.49E-11
Th-232	1.41E-19
U-233	1.03E-09
U-234	1.77E-06
U-235	5.23E-08
U-236	5.71E-09
U-238	7.75E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F002, F003

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: RLM308D.001-S

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/o Liner	WP-RLM308D.001	10.8
55-gal POC - 12" w/ Liner	WP-RLM308D.001	24.8
TDOP w/ 10 - 55-gal Drums w/o Liners	WP-RLM308D.001	31.5
Shipped Total		67.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	53.35
Aluminum-based Metals/Alloys	0.13
Other Metals	8.20
Other Inorganic Materials	8.21
Cellulosics	8.58
Rubber	2.80
Plastics	19.32
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.88E+01
Am-243	1.61E-05
Cs-137	2.48E-04
Np-237	3.04E-04
Pu-238	8.39E+00
Pu-239	1.44E+01
Pu-240	9.13E+00
Pu-241	1.69E+02
Pu-242	8.64E-03
Sr-90	2.25E-04
Th-229	4.16E-08
Th-230	2.08E-08
Th-232	2.33E-06
U-233	1.48E-04
U-234	8.05E-04
U-235	2.61E-05
U-236	8.12E-07
U-238	3.73E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, F001, F002, F003

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: RLM325D.001-S

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RLM325D.001	0.8
55-gal Drum Dir Ld w/o Liner	WP-RLM325D.001	1.2
Shipped Total		2.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	72.84
Aluminum-based Metals/Alloys	0.96
Other Metals	0.75
Other Inorganic Materials	9.13
Cellulosics	15.24
Rubber	8.22
Plastics	34.71
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.58E+00
Am-243	7.20E-05
Cs-137	3.10E-04
Np-237	1.64E-05
Pu-238	2.88E-01
Pu-239	1.54E+00
Pu-240	5.75E-01
Pu-241	1.13E+01
Pu-242	1.35E-04
Sr-90	2.86E-04
Th-229	1.28E-14
Th-230	9.99E-09
Th-232	1.68E-18
U-233	1.38E-10
U-234	5.56E-04
U-235	2.29E-05
U-236	3.41E-08
U-238	2.18E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D034, D037, D043, F001, F002, F003, F004, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: RLMHASH.001-S

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3111	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	WP-RLMHASH.001	62.0
55-gal POC - 12" w/o Liner	WP-RLMHASH.001	0.2
Shipped Total		62.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	16.75
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.21E+01
Cs-137	5.89E-08
Np-237	2.36E-05
Pu-238	1.24E+00
Pu-239	3.93E+01
Pu-240	9.73E+00
Pu-241	5.41E+01
Pu-242	1.31E-03
Sr-90	2.78E-08
Th-229	1.57E-08
Th-230	5.88E-10
Th-232	2.57E-16
U-233	2.78E-05
U-234	2.16E-05
U-235	2.43E-07
U-236	1.73E-06
U-238	1.19E-12

Haz. Waste No(s).

D005, D006, D007,
D008, D011No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RLMLB-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Lawrence Berkeley Nat Lab TRU Mixed Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	281.31
Aluminum-based Metals/Alloys	44.34
Other Metals	0.00
Other Inorganic Materials	21.91
Cellulosics	53.51
Rubber	22.93
Plastics	54.53
Cements	0.00
Inorganic Matrix	7.64
Organic Matrix	0.00
Soils/gravel	9.17
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.01E-01
Cm-244	3.69E+01
Np-237	1.45E-06
Pu-238	2.70E-02
Pu-239	1.25E-01
Pu-240	2.34E-01
Pu-241	8.17E-01
Pu-242	2.85E-06
Th-229	5.65E-14
Th-230	2.46E-10
Th-232	6.33E-17
U-233	7.46E-11
U-234	2.12E-06
U-235	3.09E-09
U-236	1.22E-07
U-238	1.08E-14

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RLMLL-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Lawrence Livermore TRU Mixed Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
85-gal Drum Dir Ld w/ Liner	0.3	0.0	0.3
Current Form Total	0.7	0.0	0.7

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	393.83
Aluminum-based Metals/Alloys	62.07
Other Metals	0.00
Other Inorganic Materials	30.68
Cellulosics	74.91
Rubber	32.11
Plastics	76.34
Cements	0.00
Inorganic Matrix	10.70
Organic Matrix	0.00
Soils/gravel	12.84
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.91E-01
Np-237	1.88E-06
Pu-238	2.32E-02
Pu-239	1.15E-01
Pu-240	6.50E-02
Pu-241	4.89E-01
Pu-242	2.63E-06
Th-229	1.35E-13
Th-230	4.10E-10
Th-232	5.51E-17
U-233	1.32E-10
U-234	2.57E-06
U-235	3.87E-09
U-236	6.56E-08
U-238	1.35E-14

Haz. Waste No(s).

D006, D007, D008, D011

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

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

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RLMPDT.001	13.5
55-gal Drum Dir Ld w/o Liner	WP-RLMPDT.001	377.1
55-gal POC - 12" w/ Liner	WP-RLMPDT.001	39.1
SWB Dir Ld w/o Liner	WP-RLMPDT.001	497.1
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-RLMPDT.001	13.5
TDOP w/ 10 - 55-gal Drums w/o Liners	WP-RLMPDT.001	738.0
Shipped Total		1678.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	53.84
Aluminum-based Metals/Alloys	0.18
Other Metals	6.31
Other Inorganic Materials	7.62
Cellulosics	11.36
Rubber	9.13
Plastics	18.44
Cements	0.00
Inorganic Matrix	0.18
Organic Matrix	0.02
Soils/gravel	0.23
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.05E+00
Am-243	1.11E-06
Cs-137	1.47E-05
Np-237	7.99E-05
Pu-238	5.97E-01
Pu-239	4.02E+00
Pu-240	1.31E+00
Pu-241	1.88E+01
Pu-242	2.55E-04
Sr-90	1.33E-05
Th-229	5.81E-08
Th-230	5.65E-10
Th-232	2.02E-09
U-233	2.07E-04
U-234	2.35E-05
U-235	6.15E-07
U-236	1.17E-07
U-238	4.50E-06

Haz. Waste No(s).

D004, D005, D006,
D007, D008, D009,
D010, D011, D019,
D030No TRUCON
Codes Provided

Waste Stream Description

N/A

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

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RLMPURX.001	0.4
55-gal Drum Dir Ld w/o Liner	WP-RLMPURX.001	41.0
TDOP w/ 10 - 55-gal Drums w/o Liners	WP-RLMPURX.001	76.5
Shipped Total		117.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	44.56
Aluminum-based Metals/Alloys	0.24
Other Metals	0.95
Other Inorganic Materials	7.88
Cellulosics	8.52
Rubber	22.86
Plastics	22.65
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.10
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.73E+00
Am-243	9.80E-07
Cs-137	1.17E-04
Np-237	1.21E-05
Pu-238	1.64E+00
Pu-239	8.33E+00
Pu-240	3.29E+00
Pu-241	9.71E+01
Pu-242	8.39E-04
Sr-90	1.02E-04
Th-229	9.65E-08
Th-230	3.12E-10
Th-232	2.17E-17
U-233	3.43E-04
U-234	1.86E-05
U-235	1.70E-07
U-236	2.93E-07
U-238	2.22E-06

Haz. Waste No(s).

D005, D006, D008,
D009, D011No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: RLMSSC.001-S

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	WP-RLMSSC.001	64.7
Shipped Total		64.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	49.32
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.03E+01
Np-237	1.73E-05
Pu-238	3.27E+00
Pu-239	4.31E+01
Pu-240	9.58E+00
Pu-241	1.66E+02
Pu-242	1.12E-03
Th-229	3.38E-14
Th-230	1.21E-09
Th-232	1.75E-16
U-233	1.99E-10
U-234	5.04E-05
U-235	3.12E-07
U-236	1.42E-06
U-238	6.08E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: RLMWARD.001-S

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RLMWARD.001	5.6
55-gal Drum Dir Ld w/o Liner	WP-RLMWARD.001	15.0
Shipped Total		20.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	33.84
Aluminum-based Metals/Alloys	0.00
Other Metals	0.96
Other Inorganic Materials	13.38
Cellulosics	37.65
Rubber	10.74
Plastics	39.21
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.13E+00
Cs-137	2.02E-07
Np-237	7.87E-06
Pu-238	3.92E-01
Pu-239	5.02E-01
Pu-240	3.46E-01
Pu-241	8.90E+00
Pu-242	2.68E-04
Sr-90	1.83E-07
Th-229	1.56E-15
Th-230	1.48E-09
Th-232	2.53E-19
U-233	3.35E-11
U-234	1.65E-04
U-235	5.50E-06
U-236	1.03E-08
U-238	4.93E-05

Haz. Waste No(s).

D007, D008, D009,
F001, F002, F003,
F005No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RLNPDT.002-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-RLNPDT.002	62.4
55-gal Drum Dir Ld w/o Liner	WP-RLNPDT.002	267.9
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-RLNPDT.002	4.5
TDOP w/ 10 - 55-gal Drums w/o Liners	WP-RLNPDT.002	103.5
Shipped Total		438.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	55.24
Aluminum-based Metals/Alloys	0.93
Other Metals	0.79
Other Inorganic Materials	25.15
Cellulosics	19.19
Rubber	8.43
Plastics	42.96
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.05
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.39E+00
Am-243	7.95E-06
Cs-137	3.21E-06
Np-237	6.53E-06
Pu-238	4.54E-01
Pu-239	4.59E+00
Pu-240	1.10E+00
Pu-241	1.60E+01
Pu-242	1.91E-04
Sr-90	2.21E-06
Th-229	3.47E-14
Th-230	7.55E-10
Th-232	1.42E-10
U-233	1.34E-10
U-234	1.79E-05
U-235	3.87E-07
U-236	1.95E-07
U-238	9.91E-07

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

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

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/o Liner	WP-RLNPURX.001	34.3
TDOP w/ 10 - 55-gal Drums w/o Liners	WP-RLNPURX.001	4.5
Shipped Total		38.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	52.54
Aluminum-based Metals/Alloys	1.02
Other Metals	1.00
Other Inorganic Materials	18.32
Cellulosics	5.92
Rubber	8.89
Plastics	25.30
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.03E+00
Am-243	1.07E-06
Cs-137	4.97E-05
Np-237	7.04E-06
Pu-238	2.56E+00
Pu-239	1.06E+01
Pu-240	4.13E+00
Pu-241	1.63E+02
Pu-242	1.29E-03
Sr-90	3.18E-05
Th-229	1.07E-14
Th-230	8.37E-10
Th-232	7.56E-17
U-233	7.09E-11
U-234	3.70E-05
U-235	5.23E-08
U-236	6.12E-07
U-238	9.75E-13

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: RLPFP-01

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	2345Z TRU Mixed Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1091.4	0.0	1091.4
85-gal Drum Dir Ld w/ Liner	669.8	0.0	669.8
Box - Misc	4638.4	0.0	4638.4
SWB Dir Ld w/ Liner	35.9	0.0	35.9
Uncontained	4739.0	0.0	4739.0
Current Form Total	11174.4	0.0	11174.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1838.3	0.0	1838.3
SWB Dir Ld w/ Liner	10574.6	0.0	10574.6
Final Form Total	12412.9	0.0	12412.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	54.41
Aluminum-based Metals/Alloys	0.33
Other Metals	2.17
Other Inorganic Materials	14.61
Cellulosics	18.22
Rubber	12.41
Plastics	30.73
Cements	0.00
Inorganic Matrix	0.04
Organic Matrix	0.01
Soils/gravel	0.30
Vitrified	0.00
Packaging Material, Steel	150.14
Packaging Material, Plastic	6.50
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.72E+00
Am-243	6.05E-07
Cs-137	1.55E-05
Np-237	4.74E-05
Pu-238	8.19E-01
Pu-239	5.78E+00
Pu-240	1.87E+00
Pu-241	2.75E+01
Pu-242	3.76E-04
Sr-90	1.41E-05
Th-232	3.96E-08
U-233	2.35E-04
U-234	2.75E-04
U-235	7.82E-06
U-236	2.91E-10
U-238	1.44E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D030, D035, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters. The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the PLUTONIUM FABRICATION FACILITY.

Waste Stream ID: RLPFP-03

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	2345Z TRU Mixed Solid Inorganic				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	21.8	0.0	21.8
85-gal Drum Dir Ld w/ Liner	0.3	0.0	0.3
Current Form Total	22.2	0.0	22.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	22.3	0.0	22.3
Final Form Total	22.3	0.0	22.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	4.14
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	2.22
Cellulosics	5.80
Rubber	0.00
Plastics	30.02
Cements	0.00
Inorganic Matrix	407.49
Organic Matrix	5.76
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.36E+00
Cs-137	3.48E-06
Np-237	4.84E-05
Pu-238	2.09E+00
Pu-239	1.48E+01
Pu-240	4.78E+00
Pu-241	6.04E+01
Pu-242	9.75E-04
Sr-90	3.16E-06
Th-229	6.05E-08
Th-230	2.90E-08
Th-232	3.15E-17
U-233	2.15E-04
U-234	1.09E-03
U-235	6.04E-06
U-236	4.25E-07
U-238	4.99E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019

TRUCON Code(s)

122/222

Waste Stream Description

The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the PLUTONIUM FABRICATION FACILITY.

Waste Stream ID: **RLPFP-04**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Solidified Organics	Waste Matrix Code	S3200	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	2345Z TRU Mixed Solid Organic			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.9	0.0	2.9
Current Form Total	2.9	0.0	2.9

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	6.58
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.82
Cellulosics	23.24
Rubber	0.62
Plastics	34.72
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.38E-02
Np-237	1.73E-08
Pu-238	1.64E-02
Pu-239	2.29E-01
Pu-240	5.70E-02
Pu-241	6.61E-01
Pu-242	4.83E-06
Th-229	1.17E-18
Th-230	2.11E-13
Th-232	4.17E-20
U-233	3.75E-14
U-234	4.68E-08
U-235	2.26E-10
U-236	1.69E-09
U-238	7.29E-16

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D030, D032, D033

TRUCON Code(s)

112/212

Waste Stream Description

The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the PLUTONIUM FABRICATION FACILITY.; and THE STREAM CONTAINS PLASTIC/POLYURETHANE, ORGANICS, CLOTH/RAGS/NYLON, RUBBER, METAL/IRON/GALVANIZED/SHEET.

Waste Stream ID: **RLPFP-08**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	2345Z RH-TRU Mixed Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	11.9	0.0	11.9
85-gal Drum Dir Ld w/ Liner	2.9	0.0	2.9
Current Form Total	14.8	0.0	14.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	19.6	0.0	19.6
Final Form Total	19.6	0.0	19.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	34.64
Aluminum-based Metals/Alloys	0.00
Other Metals	19.50
Other Inorganic Materials	15.11
Cellulosics	2.55
Rubber	8.30
Plastics	22.27
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.37E+00
Cs-137	4.24E-06
Np-237	2.32E-06
Pu-238	3.83E-01
Pu-239	1.94E+00
Pu-240	6.81E-01
Pu-241	1.41E+01
Pu-242	1.55E-04
Sr-90	3.86E-06
U-234	6.96E-06
U-235	2.33E-07
U-236	6.29E-10
U-238	2.76E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D030, D032, D033

TRUCON Code(s)

325

Waste Stream Description

The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the PLUTONIUM FABRICATION FACILITY.; and THE STREAM CONTAINS PLASTIC/POLYURETHANE, ORGANICS, CLOTH/RAGS/NYLON, RUBBER, METAL/IRON/GALVANIZED/SHEET.

Waste Stream ID: **RLPRC-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CUPRC TRU Mixed Debris				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Current Form Total	2.1	0.0	2.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Final Form Total	2.1	0.0	2.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	46.45
Other Inorganic Materials	661.59
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	151.25
Packaging Material, Plastic	4.75
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.59E-02
Np-237	3.69E-07
Pu-238	1.53E-02
Pu-239	1.64E-01
Pu-240	4.18E-02
Pu-241	4.39E-01
Pu-242	2.80E-06
Th-229	9.02E-15
Th-230	1.88E-10
Th-232	4.96E-05
U-233	1.50E-11
U-234	1.50E-06
U-235	2.87E-08
U-236	2.48E-08
U-238	5.46E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

The waste is generated from R&D/R&D Laboratory Waste activities at the CEER University Laboratory.

Waste Stream ID: RLPURX-01

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	202A and 202AL TRU Mixed Debris				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	169.7	0.0	169.7
85-gal Drum Dir Ld w/ Liner	15.8	0.0	15.8
Box - Misc	300.8	0.0	300.8
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Current Form Total	488.2	0.0	488.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	220.1	0.0	220.1
SWB Dir Ld w/ Liner	378.0	0.0	378.0
Final Form Total	598.1	0.0	598.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	39.96
Aluminum-based Metals/Alloys	0.15
Other Metals	0.40
Other Inorganic Materials	8.81
Cellulosics	15.68
Rubber	14.54
Plastics	24.97
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.02
Vitrified	0.00
Packaging Material, Steel	145.15
Packaging Material, Plastic	14.37
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.05E+00
Am-243	6.72E-07
Cs-137	1.48E-04
Np-237	9.43E-06
Pu-238	2.06E+00
Pu-239	1.05E+01
Pu-240	4.03E+00
Pu-241	1.35E+02
Pu-242	9.68E-04
Sr-90	1.31E-04
U-233	2.47E-03
U-234	5.76E-06
U-235	1.90E-07
U-238	3.12E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D030, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

The waste is generated from Analytical Laboratory Waste activities at the PUREX PROCESS LABORATORY.; The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the PUREX CANYON AND SERVICE FACILITY

Waste Stream ID: RLPURX-07

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	202A & 202AL TRU RH Non-mixed Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	20.6	0.0	20.6
Box - Misc	11.5	0.0	11.5
Current Form Total	32.1	0.0	32.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	41.8	0.0	41.8
Final Form Total	41.8	0.0	41.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	14.84
Aluminum-based Metals/Alloys	0.00
Other Metals	0.37
Other Inorganic Materials	11.13
Cellulosics	7.42
Rubber	25.23
Plastics	18.55
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.05E+01
Np-237	1.68E-04
Pu-238	4.09E+00
Pu-239	2.60E+01
Pu-240	1.21E+01
Pu-241	7.73E+01
Pu-242	1.64E-03
Th-229	8.64E-12
Th-230	5.12E-08
Th-232	7.46E-15
U-233	9.93E-09
U-234	3.78E-04
U-235	7.44E-07
U-236	1.04E-05
U-238	7.19E-12

Haz. Waste No(s).

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

TRUCON Code(s)

325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: RLRFETS.001-S

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3111	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	WP-RLRFETS.001	63.9
Shipped Total		63.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	17.91
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.66E+00
Cs-137	2.98E-07
Np-237	1.61E-05
Pu-238	1.26E+00
Pu-239	5.97E+01
Pu-240	9.92E+00
Pu-241	7.85E+01
Pu-242	1.02E-03
Sr-90	3.04E-08
Th-229	6.62E-08
Th-230	4.79E-09
Th-232	2.62E-16
U-233	1.18E-04
U-234	9.95E-05
U-235	3.10E-06
U-236	1.76E-06
U-238	9.26E-13

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: RLSWO-01

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SWOC TRU Mixed Debris				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	22.3	0.0	22.3
85-gal Drum Dir Ld w/ Liner	4.8	0.0	4.8
Box - Misc	51.2	0.0	51.2
Uncontained	220.2	0.0	220.2
Current Form Total	298.4	0.0	298.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	25.8	0.0	25.8
SWB Dir Ld w/ Liner	285.4	0.0	285.4
Final Form Total	311.2	0.0	311.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	26.85
Aluminum-based Metals/Alloys	0.48
Other Metals	0.86
Other Inorganic Materials	9.08
Cellulosics	15.40
Rubber	49.27
Plastics	49.80
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	151.62
Packaging Material, Plastic	4.17
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.67E-01
Am-243	8.85E-08
Cs-137	4.29E-05
Np-237	7.70E-06
Pu-238	1.56E-01
Pu-239	1.51E+00
Pu-240	4.94E-01
Pu-241	6.12E+00
Pu-242	6.50E-05
Sr-90	3.90E-05
U-233	8.52E-05
U-234	1.51E-05
U-235	5.36E-07
U-238	2.95E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D030, D035, D037, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RLSWO-08**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SWOC TRU RH Mixed Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Uncontained	27.1	0.0	27.1
Current Form Total	27.1	0.0	27.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	27.6	0.0	27.6
Final Form Total	27.6	0.0	27.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	141.04
Other Inorganic Materials	1.17
Cellulosics	9.35
Rubber	0.00
Plastics	16.84
Cements	0.00
Inorganic Matrix	1.17
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.22E+00
Cs-137	2.29E+03
Np-237	1.80E-05
Pu-238	4.47E+01
Pu-239	1.14E-01
Pu-240	1.12E-01
Pu-241	4.09E+00
Pu-242	1.75E-04
Sr-90	1.50E+03
Th-229	4.34E-14
Th-230	2.12E-08
Th-232	2.95E-18
U-233	2.31E-10
U-234	7.79E-04
U-235	6.74E-10
U-236	1.99E-08
U-238	1.58E-13

No Hazardous Waste Numbers Provided

TRUCON Code(s)
325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

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

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/o Liner	WP-RLSWOCD.001	5.8
Shipped Total		5.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	46.18
Aluminum-based Metals/Alloys	2.28
Other Metals	1.14
Other Inorganic Materials	1.22
Cellulosics	14.88
Rubber	44.99
Plastics	45.34
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.69E-01
Cs-137	8.08E-05
Np-237	1.93E-06
Pu-238	1.81E-01
Pu-239	1.85E+00
Pu-240	5.66E-01
Pu-241	6.15E+00
Pu-242	5.73E-05
Sr-90	7.33E-05
Th-229	3.62E-16
Th-230	6.25E-11
Th-232	4.15E-19
U-233	7.89E-12
U-234	7.20E-06
U-235	2.48E-07
U-236	1.68E-08
U-238	2.60E-09

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D030, D034, D037, D043, F001, F002, F003, F004, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

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

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5111	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
SWB Dir Ld w/o Liner	WP-RLVIPAC.001	155.0
Shipped Total		155.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	15.18
Aluminum-based Metals/Alloys	1.69
Other Metals	1.35
Other Inorganic Materials	5.42
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.32E+00
Am-243	1.10E-07
Cs-137	1.25E-05
Np-237	2.03E-05
Pu-238	1.00E+00
Pu-239	6.31E+00
Pu-240	1.93E+00
Pu-241	9.72E+00
Pu-242	5.69E-04
Sr-90	1.14E-05
Th-229	9.38E-09
Th-230	3.03E-08
Th-232	1.41E-18
U-233	1.00E-04
U-234	3.37E-03
U-235	8.81E-05
U-236	5.72E-08
U-238	1.69E-03

Haz. Waste No(s).

D005, D006, D007,
D008, D011No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **RLWAR-01**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Ward TRU Mixed Debris				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	73.8	0.0	73.8
85-gal Drum Dir Ld w/ Liner	32.5	0.0	32.5
Box - Misc	481.2	0.0	481.2
Current Form Total	587.5	0.0	587.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	114.0	0.0	114.0
SWB Dir Ld w/ Liner	602.9	0.0	602.9
Final Form Total	716.9	0.0	716.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	72.37
Aluminum-based Metals/Alloys	0.06
Other Metals	0.63
Other Inorganic Materials	11.44
Cellulosics	25.02
Rubber	7.15
Plastics	30.64
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	149.89
Packaging Material, Plastic	6.89
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.60E-01
Cs-137	9.96E-08
Np-237	4.84E-06
Pu-238	2.75E-01
Pu-239	3.45E-01
Pu-240	2.37E-01
Pu-241	6.25E+00
Pu-242	1.87E-04
Sr-90	9.06E-08
U-234	1.08E-04
U-235	3.73E-06
U-238	1.97E-05

Haz. Waste No(s).

D007, D008, D009, D035, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters. CH TRU waste generated from Facility/Equipment Operation and Maintenance activities.

Waste Stream ID: **RLWAR-03**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	WARD solidified inorganics			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1.2	0.0	1.2
85-gal Drum Dir Ld w/ Liner	1.3	0.0	1.3
Current Form Total	2.5	0.0	2.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.5	0.0	2.5
Final Form Total	2.5	0.0	2.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.92
Aluminum-based Metals/Alloys	0.00
Other Metals	0.12
Other Inorganic Materials	459.88
Cellulosics	3.67
Rubber	0.00
Plastics	47.43
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.10E+00
Np-237	1.89E-05
Pu-238	6.75E-01
Pu-239	8.01E-01
Pu-240	5.05E-01
Pu-241	1.37E+01
Pu-242	3.99E-04

Haz. Waste No(s).

D007, D008, D009,
D035, F001, F002,
F003, F005

TRUCON Code(s)

122/222

Waste Stream Description

Solidified inorganic CH TRU waste generated from Facility/Equipment Operation and Maintenance activities.

Waste Stream ID: **RLWTP-08**

Appendix A

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Waste Treatment Plant TRU RH Mixed Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Uncontained	0.0	399.1	399.1
Current Form Total	0.0	399.1	399.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	0.0	364.9	364.9
Final Form Total	0.0	364.9	364.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	315.08
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	83.55
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.00E-02
Am-243	2.41E-06
Cs-137	8.65E+00
Np-237	1.33E-05
Pu-238	8.50E-04
Pu-239	1.37E-02
Pu-240	2.34E-03
Pu-241	2.26E-02
Pu-242	1.60E-07
Sr-90	6.10E+00
Th-229	9.30E-09
Th-230	5.84E-10
Th-232	5.13E-17
U-233	9.92E-05
U-234	6.49E-05
U-235	2.78E-06
U-236	1.04E-06
U-238	6.18E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)
325

Waste Stream Description

RH debris waste generated from future WTP operations

Waste Stream ID: SA-T001

Appendix A

TRU Waste Inventory Profile Report

Site	Sandia National Laboratory - Albuquerque	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Lovelace ITRI Debris Waste Stream	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	5.4	0.0	5.4
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	1.0	0.0	1.0
Current Form Total	6.4	0.0	6.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	5.4	0.0	5.4
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	1.0	0.0	1.0
Final Form Total	6.4	0.0	6.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	100.00
Aluminum-based Metals/Alloys	3.00
Other Metals	6.00
Other Inorganic Materials	15.00
Cellulosics	3.00
Rubber	5.00
Plastics	5.00
Cements	15.00
Inorganic Matrix	40.00
Organic Matrix	5.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	141.04
Packaging Material, Plastic	35.01
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.66E-01
Cm-244	7.30E-01
Np-237	3.61E-06
Pu-238	3.52E-02
Pu-239	5.60E-01
Pu-240	1.30E-03
Th-229	1.17E-13
Th-230	8.13E-11
Th-232	7.30E-04
U-233	1.91E-10
U-234	1.37E-06
U-235	7.18E-09
U-236	2.71E-10

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

Heterogeneous CH debris laboratory waste from Pu aerosol preparation experiments

Waste Stream ID: **SA-W134**

Appendix A

TRU Waste Inventory Profile Report

Site	Sandia National Laboratory - Albuquerque	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Transuranic Debris Waste from Hot Cell Facility			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
10-gal Drum	0.0	0.0	0.0
14-gal Drum	0.1	0.0	0.1
20-gal Drum	0.1	0.0	0.1
2-gal Can Stainless Steel	0.0	0.0	0.0
30-gal Drum	0.3	0.0	0.3
55-gal Drum Dir Ld w/o Liner	4.0	0.0	4.0
5-gal Drum	0.1	0.0	0.1
85-gal Drum w/ 1 - 55-gal Drum w/o Liner	0.3	0.0	0.3
Box - 7' x 4' x 4'	12.7	0.0	12.7
Current Form Total	17.6	0.0	17.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	14.1	0.0	14.1
Final Form Total	14.1	0.0	14.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	80.00
Aluminum-based Metals/Alloys	5.00
Other Metals	10.00
Other Inorganic Materials	1.00
Cellulosics	2.00
Rubber	2.00
Plastics	5.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.95E-01
Am-243	1.08E-07
Cm-244	1.01E-04
Cs-137	4.06E+00
Np-237	1.02E-03
Pu-238	2.80E-02
Pu-239	5.91E-02
Pu-240	8.21E-03
Pu-241	1.19E-02
Pu-242	3.38E-12
Sr-90	4.04E+00
Th-229	1.23E-07
Th-230	2.38E-08
Th-232	6.02E-19
U-233	1.31E-04
U-234	2.65E-04
U-235	1.59E-05
U-236	2.44E-09
U-238	2.89E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

Heterogeneous CH Debris from SNL/NM Hot Cell Facility D&D project and other miscellaneous waste generators.

Waste Stream ID: SA-W134M

Appendix A

TRU Waste Inventory Profile Report

Site	Sandia National Laboratory - Albuquerque	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	Mixed-TRU Debris Waste from SNL/NM - Contact Handled			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	2.1	0.0	2.1
Final Form Total	2.1	0.0	2.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	80.00
Aluminum-based Metals/Alloys	5.00
Other Metals	10.00
Other Inorganic Materials	1.00
Cellulosics	2.00
Rubber	2.00
Plastics	5.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.80E-02
Am-243	3.83E-10
Cm-244	9.55E-05
Cs-137	7.33E-02
Np-237	4.52E-06
Pu-238	3.26E-03
Pu-239	2.91E-02
Pu-240	1.05E-02
Pu-241	4.46E-02
Pu-242	1.20E-14
Sr-90	7.28E-02
Th-229	2.02E-06
Th-230	1.97E-07
Th-232	7.69E-19
U-233	2.15E-03
U-234	2.19E-03
U-235	2.27E-05
U-236	3.11E-09
U-238	3.00E-05

Haz. Waste No(s).

D006, D009, D011

TRUCON Code(s)

125/225

Waste Stream Description

Heterogeneous CH mixed debris from SNL/NM Hot Cell Facility D&D project and other Miscellaneous waste generators.

Waste Stream ID: SA-W135

Appendix A

TRU Waste Inventory Profile Report

Site	Sandia National Laboratory - Albuquerque	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	RH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	TRU Waste from SNL/NM - Remote Handled			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	0.4	0.0	0.4
Cask - Lead Lined	3.9	0.0	3.9
Lead Pig	0.1	0.0	0.1
Current Form Total	4.4	0.0	4.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	6.2	0.0	6.2
Final Form Total	6.2	0.0	6.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	80.00
Aluminum-based Metals/Alloys	5.00
Other Metals	10.00
Other Inorganic Materials	1.00
Cellulosics	2.00
Rubber	2.00
Plastics	5.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.63E+00
Cm-244	7.50E-02
Cs-137	9.52E+01
Np-237	2.05E-04
Pu-238	8.87E-01
Pu-239	6.20E-01
Pu-240	9.30E-02
Pu-241	4.26E-03
Sr-90	9.46E+01
Th-229	4.03E-12
Th-230	1.45E-07
Th-232	6.81E-18
U-233	8.61E-09
U-234	1.63E-03
U-235	1.20E-04
U-236	2.76E-08
U-238	4.00E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)
325

Waste Stream Description

Heterogeneous RH debris from SNL/NM Hot Cell Facility D&D Project and other miscellaneous waste generators.

Waste Stream ID: SA-W136

Appendix A

TRU Waste Inventory Profile Report

Site	Sandia National Laboratory - Albuquerque	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5110	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH TRU Debris waste from Z-machine			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	0.6	4.4	5.0
Current Form Total	0.6	4.4	5.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	0.6	4.4	5.0
Final Form Total	0.6	4.4	5.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1830.00
Aluminum-based Metals/Alloys	0.00
Other Metals	45.00
Other Inorganic Materials	0.44
Cellulosics	0.00
Rubber	2.05
Plastics	1.57
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	2.55
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.49E-03
Np-237	5.38E-10
Pu-238	3.35E-02
Pu-239	5.71E-01
Pu-240	1.31E-01
Pu-241	1.06E+00
Pu-242	1.52E-05
Th-229	2.70E-20
Th-230	4.30E-13
Th-232	9.59E-20
U-233	9.67E-16
U-234	9.56E-08
U-235	5.63E-10
U-236	3.88E-09
U-238	2.29E-15

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

CH debris waste from the Z-machine, Pu ICE experiments. Waste generated at SNL/NM, but is LANL waste

Waste Stream ID: SR2001.001.00-S

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5300	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-SR2001.001.00	61.2
Shipped Total		61.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	11.89
Aluminum-based Metals/Alloys	0.00
Other Metals	0.29
Other Inorganic Materials	8.37
Cellulosics	7.74
Rubber	1.00
Plastics	86.03
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.28E-02
Cs-137	8.19E-08
Np-237	2.04E-08
Pu-238	1.75E-02
Pu-239	1.58E-01
Pu-240	3.14E-02
Pu-241	4.44E-01
Pu-242	3.16E-06
Th-229	4.34E-17
Th-230	8.32E-12
Th-232	8.28E-19
U-233	2.42E-13
U-234	3.06E-07
U-235	9.34E-10
U-236	5.59E-09
U-238	2.86E-15

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: SR2002.002.00-S

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5440	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-SR2002.002.00	69.9
Shipped Total		69.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	8.65
Aluminum-based Metals/Alloys	0.40
Other Metals	0.32
Other Inorganic Materials	6.82
Cellulosics	6.82
Rubber	1.36
Plastics	81.40
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.90E-02
Cs-137	2.45E-07
Np-237	7.32E-08
Pu-238	6.67E-03
Pu-239	1.62E-01
Pu-240	3.75E-02
Pu-241	9.26E-01
Pu-242	5.11E-06
Sr-90	2.07E-08
Th-229	5.94E-07
Th-230	2.18E-12
Th-232	6.87E-19
U-233	1.27E-03
U-234	9.65E-08
U-235	8.01E-10
U-236	5.56E-09
U-238	3.86E-15

Haz. Waste No(s).

D008, F001, F002, F003, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **SR-BCLCH-MT01**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	JN-4 D&D Debris Waste	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	11.3	0.0	11.3
Current Form Total	11.3	0.0	11.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	11.3	0.0	11.3
Final Form Total	11.3	0.0	11.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	60.00
Aluminum-based Metals/Alloys	60.00
Other Metals	60.00
Other Inorganic Materials	72.00
Cellulosics	204.50
Rubber	122.41
Plastics	240.60
Cements	62.41
Inorganic Matrix	0.00
Organic Matrix	36.05
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.63E+00
Np-237	1.87E-06
Pu-238	3.29E+02
Pu-239	5.49E+00
Pu-240	1.44E+00
Pu-241	5.67E+01
Pu-242	2.34E-04
Th-229	1.85E-15
Th-230	6.87E-08
Th-232	1.69E-17
U-233	1.52E-11
U-234	3.80E-03
U-235	2.17E-08
U-236	1.71E-07
U-238	1.41E-13

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

JN-1 D&D Debris Waste consists of heterogeneous debris waste generated by the activities conducted in Building JN-1. The waste includes paper, plastic, rubber, paint chips, crushed metal cans, prefilters, glass, concrete, grout, lead shot, and miscellaneous laboratory equipment

Waste Stream ID: SR-BCLRH-MT01

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Combustible	Waste Matrix Code	S5390	Handling	RH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Hazardous organic debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	28.60
Aluminum-based Metals/Alloys	8.40
Other Metals	101.00
Other Inorganic Materials	10.10
Cellulosics	204.00
Rubber	27.00
Plastics	101.00
Cements	18.50
Inorganic Matrix	0.00
Organic Matrix	1.70
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.12E+00
Am-243	2.15E-02
Cm-244	1.98E+00
Cs-137	5.21E+01
Np-237	2.63E-04
Pu-238	2.67E+00
Pu-239	3.55E-01
Pu-240	5.79E-01
Pu-241	3.84E+01
Pu-242	1.73E-03
Sr-90	3.42E+01
Th-229	1.24E-11
Th-230	3.61E-08
Th-232	3.77E-14
U-233	3.52E-08
U-234	1.02E-03
U-235	1.44E-05
U-236	1.91E-04
U-238	2.80E-04

Haz. Waste No(s).

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

TRUCON Code(s)

321

Waste Stream Description

Hazardous organic debris consists of the materials generated during repackaging of the waste materials generated from research and development activities conducted in Building JN-1. This waste consists primarily of iron based metals, paper, plastic, cloth, aluminum, cellulosics, rubber, and lead items (bricks, shot, apron, and gloves).

Waste Stream ID: SR-BCLRH-T001

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Solidified Organics	Waste Matrix Code	S3211	Handling	RH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Pool Water Filter Resin	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	5.60
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	5.60
Cellulosics	6.70
Rubber	5.60
Plastics	6.70
Cements	33.70
Inorganic Matrix	0.00
Organic Matrix	129.20
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.17E-02
Am-243	1.49E-04
Cm-244	1.37E-02
Cs-137	3.62E-01
Np-237	1.82E-06
Pu-238	1.86E-02
Pu-239	2.46E-03
Pu-240	4.01E-03
Pu-241	2.66E-01
Pu-242	1.20E-05
Sr-90	2.36E-01
Th-229	8.56E-14
Th-230	2.51E-10
Th-232	2.63E-16
U-233	2.44E-10
U-234	7.08E-06
U-235	1.00E-07
U-236	1.33E-06
U-238	1.94E-06

Haz. Waste No(s).

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

TRUCON Code(s)

326

Waste Stream Description

Pool Water Filter Resin consists of ion-exchange resin (nuclear grade), which was used for deionizing the Transfer/Storage Pool water. The CM-2 Regenerated Mixed Bed Resin used was contained in muslin bags (cotton bags). The matrix will also include Floor Dry (diatomaceous earth) used as an absorbent during the original packaging of this waste and 10 lbs. of absorbent (50:50 Floor Dry and Radsorb) added during repackaging to absorb any water from condensation or dewatering.

Waste Stream ID: **SR-BCLRH-T002**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	RH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Pool Water Prefilters and Debris			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	8.40
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	379.30
Cellulosics	8.40
Rubber	8.40
Plastics	8.40
Cements	25.30
Inorganic Matrix	0.00
Organic Matrix	18.50
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.30E-01
Cm-244	2.39E-01
Cs-137	4.27E-01
Np-237	6.89E-07
Pu-238	6.04E-01
Pu-239	6.58E-02
Pu-240	1.07E-01
Sr-90	1.72E+01
Th-229	3.39E-12
Th-230	1.06E-08
Th-232	1.14E-14
U-233	9.05E-09
U-234	2.99E-04
U-235	4.38E-06
U-236	5.76E-05
U-238	8.34E-05

Haz. Waste No(s).

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

TRUCON Code(s)

321

Waste Stream Description

Pool Water Prefilters and Debris consists of the cartridge prefilters and debris generated during the change-out of resin used for filtering the Transfer/Storage Pool water. The filter matrix is composed of glass and cellulose fibers combined with melamine resin. The end caps are polypropylene and the filters are placed in the canisters with rubber gaskets (butyl/nitrile). Other debris that may be present from the original packaging may include paper (blotter paper and Floor Dry bags), plastic liners, rubber gaskets, muslin resin bags, rubber gloves, and other miscellaneous plastic, cellulosics, and metal materials. The waste matrix will also include Floor Dry and Radsorb added during repackaging to absorb any water from condensation or dewatering.

Waste Stream ID: **SR-BCLRH-T003**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Combustible	Waste Matrix Code	S5390	Handling	RH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Organic Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	8.3	0.0	8.3
Current Form Total	8.3	0.0	8.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	12.5	0.0	12.5
Final Form Total	12.5	0.0	12.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	8.00
Aluminum-based Metals/Alloys	8.00
Other Metals	1.60
Other Inorganic Materials	9.60
Cellulosics	31.90
Rubber	23.90
Plastics	95.60
Cements	17.60
Inorganic Matrix	0.00
Organic Matrix	1.60
Soils/gravel	1.60
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.56E-01
Am-243	1.07E-03
Cm-244	9.87E-02
Cs-137	2.60E+00
Np-237	1.31E-05
Pu-238	1.33E-01
Pu-239	1.77E-02
Pu-240	2.88E-02
Pu-241	1.91E+00
Pu-242	8.63E-05
Sr-90	1.70E+00
Th-229	6.15E-13
Th-230	1.80E-09
Th-232	1.89E-15
U-233	1.75E-09
U-234	5.07E-05
U-235	7.17E-07
U-236	9.56E-06
U-238	1.39E-05

Haz. Waste No(s).

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

TRUCON Code(s)

321

Waste Stream Description

Organic Debris consists of the materials generated during repackaging of the waste materials generated from research and development activities conducted in Building JN-1. This waste consists primarily of rubber debris material including polyethylene, polyvinyl chloride, nylon, Styrofoam, Tygon, plexiglass, and neoprene. Wood debris with no signs of hazardous waste contamination may also be included. Waste items may include non-deteriorated sheeting, hose/tubing, respirators, boots, rain suits, o-rings, electrical cords, safety glasses, plexiglass panels, plywood, and pallets. The waste matrix will also include Floor Dry and Radsorb added during repackaging to absorb any water from condensation or dewatering

Waste Stream ID: **SR-BCLRH-T004**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5129	Handling	RH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Inorganic Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	8.1	0.0	8.1
Current Form Total	8.1	0.0	8.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	11.6	0.0	11.6
Final Form Total	11.6	0.0	11.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	267.10
Aluminum-based Metals/Alloys	121.60
Other Metals	1.60
Other Inorganic Materials	113.20
Cellulosics	17.80
Rubber	3.20
Plastics	97.00
Cements	17.80
Inorganic Matrix	0.00
Organic Matrix	1.60
Soils/gravel	40.40
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.01E+00
Am-243	3.44E-02
Cm-244	3.17E+00
Cs-137	8.35E+01
Np-237	4.21E-04
Pu-238	4.29E+00
Pu-239	5.69E-01
Pu-240	9.31E-01
Pu-241	6.17E+01
Pu-242	2.78E-03
Sr-90	5.48E+01
Th-229	1.99E-11
Th-230	5.77E-08
Th-232	6.07E-14
U-233	5.65E-08
U-234	1.63E-03
U-235	2.32E-05
U-236	3.07E-04
U-238	4.50E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D019, F002, F005
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TRUCON Code(s)

321

Waste Stream Description

Inorganic Debris consists of glass and metal debris generated during repackaging of the waste materials generated from research and development activities conducted in Building JN-1. Glass debris includes laboratory glassware, windows, and various glass apparatus. Metal debris may include deteriorated berry cans, cable wire, plachets, sign, valves, piping, strapping, tools, foil, sheeting, fixtures, equipment, hardware, fuel rod cladding, and Metmounts (sectioned metal material embedded in a plastic matrix). Metals of construction include stainless steel, aluminum, iron, copper, beryllium, and zirconium alloy (Zr-2, Zr-4). The waste matrix will also include Floor Dry and Radsorb added during repackaging to absorb any water from condensation or dewatering.

Waste Stream ID: **SR-BCLRH-T005**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	RH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Tri-Nuc Filters	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	61.70
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	22.50
Cellulosics	5.60
Rubber	0.00
Plastics	39.30
Cements	72.00
Inorganic Matrix	0.00
Organic Matrix	12.40
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.45E+00
Am-243	3.05E-02
Cm-244	2.82E+00
Cs-137	7.41E+01
Np-237	3.74E-04
Pu-238	3.82E+00
Pu-239	5.05E-01
Pu-240	8.24E-01
Pu-241	5.48E+01
Pu-242	2.47E-03
Sr-90	4.85E+01
Th-229	1.76E-11
Th-230	5.15E-08
Th-232	5.39E-14
U-233	5.01E-08
U-234	1.45E-03
U-235	2.06E-05
U-236	2.73E-04
U-238	4.00E-04

Haz. Waste No(s).

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

TRUCON Code(s)

321

Waste Stream Description

Tri-Nuc Filters consists of filter cartridges used in the underwater vacuum system for cleaning the surfaces and filtering the water of the Transfer/Storage Pool. The cartridges are 30" long and 6" in diameter and consist of media enclosed within a stainless steel screen shroud, and aluminum screen reinforced plastisol end caps. The filter media is composed of polypropylene, melt brown reinforced tyvar, and is available in 0.3, 1, 5, 10, and 20-micron mesh sizes. The waste matrix will also include Floor Dry (diatomaceous earth) and Radsorb (50:50 mix) added to each liner.

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **SR-BCLRH-T006**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3150	Handling	RH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Slugs	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	3.40
Cements	16.80
Inorganic Matrix	0.00
Organic Matrix	154.50
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.04E+00
Am-243	7.17E-03
Cm-244	6.62E-01
Cs-137	1.74E+01
Np-237	8.78E-05
Pu-238	8.94E-01
Pu-239	1.19E-01
Pu-240	1.94E-01
Pu-241	1.29E+01
Pu-242	5.80E-04
Sr-90	1.15E+01
Th-229	4.14E-12
Th-230	1.21E-08
Th-232	1.26E-14
U-233	1.18E-08
U-234	3.40E-04
U-235	4.84E-06
U-236	6.40E-05
U-238	9.37E-05

Haz. Waste No(s).

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

TRUCON Code(s)

314

Waste Stream Description

Slugs were produced in Alpha-Gamma Cell 7 by dissolving irradiated (burnup) fuel in an acid solution, which was then diluted several times and mixed with cement and water and allowed to solidify in Styrofoam cups. The slugs will contain only limited amounts of dissolved fuel because of the dilution. The Styrofoam cups will be segregated from the slugs prior to final packaging. The waste matrix will also include Floor Dry and Radsorb added during repackaging to absorb any water from condensation or dewatering.

Waste Stream ID: **SR-BCLRH-T007**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3129	Handling	RH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Laundry Sludge	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	59.00
Cellulosics	10.10
Rubber	0.00
Plastics	3.40
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	10.10
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.62E-03
Am-243	5.91E-05
Cm-244	5.47E-03
Cs-137	1.44E-01
Np-237	7.24E-07
Pu-238	7.38E-03
Pu-239	9.79E-04
Pu-240	1.60E-03
Pu-241	1.06E-01
Pu-242	4.77E-06
Sr-90	9.46E-02
Th-229	3.41E-14
Th-230	9.98E-11
Th-232	1.04E-16
U-233	9.70E-11
U-234	2.81E-06
U-235	4.00E-08
U-236	5.28E-07
U-238	7.74E-07

Haz. Waste No(s).

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

TRUCON Code(s)

321

Waste Stream Description

Laundry sludge consists of a particulate sludge (dirt, debris, and lint) generated when the laundry system still box requires cleaning. The box is heated to boil off the water contained in the particulate material. The resulting sludge is raked into plastic bags containing Radsorb (10%-20% by weight) to absorb any water from condensation or dewatering.

Waste Stream ID: **SR-BCLRH-T008**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	RH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Laundry Sock Filters and Lint	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	6.70
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	39.30
Cellulosics	134.80
Rubber	0.00
Plastics	39.30
Cements	16.90
Inorganic Matrix	0.00
Organic Matrix	12.40
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.03E-01
Am-243	7.06E-04
Cm-244	6.54E-02
Cs-137	1.72E+00
Np-237	8.63E-06
Pu-238	8.83E-02
Pu-239	1.17E-02
Pu-240	1.91E-02
Pu-241	1.27E+00
Pu-242	5.70E-05
Sr-90	1.13E+00
Th-229	4.06E-13
Th-230	1.19E-09
Th-232	1.25E-15
U-233	1.16E-09
U-234	3.36E-05
U-235	4.77E-07
U-236	6.31E-06
U-238	9.25E-06

Haz. Waste No(s).

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

TRUCON Code(s)

321

Waste Stream Description

Laundry Sock Filters and Lint are generated during the operation of the BCLDP TRU waste laundry system in the JN-1 Pump Room. This stream includes Rosedale polypropylene high-efficiency liquid filter bags and cotton lint from laundered mop heads and rags. No RCRA waste was processed through the laundry.

Waste Stream ID: **SR-BCLRH-T009**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	RH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Pressure Wash Filters	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	22.50
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	168.60
Cellulosics	42.10
Rubber	8.40
Plastics	15.50
Cements	35.10
Inorganic Matrix	0.00
Organic Matrix	91.20
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.46E-01
Am-243	2.38E-03
Cm-244	2.20E-01
Cs-137	5.81E+00
Np-237	2.91E-05
Pu-238	2.97E-01
Pu-239	3.94E-02
Pu-240	6.44E-02
Pu-241	4.26E+00
Pu-242	1.92E-04
Sr-90	3.79E+00
Th-229	1.37E-12
Th-230	4.02E-09
Th-232	4.21E-15
U-233	3.91E-09
U-234	1.13E-04
U-235	1.60E-06
U-236	2.13E-05
U-238	3.11E-05

Haz. Waste No(s).

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

TRUCON Code(s)

321

Waste Stream Description

Pressure Wash Filters used in the pressure wash water recovery system for filtering wash water transferred for evaporation. Three types of filter/cartridges were used. Cotton media filters consisting of cotton yarn and cotton media wound around a polypropylene core. Resin media type cartridges composed of glass and cellulose fibers combined with melamine resin, and a polypropylene sock filter consisting of polypropylene material supported by a carbon steel ring. Small quantities of sludge collected in the filter housings and settling tank bottoms are included in this waste stream. The waste matrix also includes Radsorb added to each liner.

Waste Stream ID: **SR-BCLRH-T010**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5111	Handling	RH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Sabotage Pieces			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	129.20
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	14.60
Rubber	0.00
Plastics	14.60
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.58E+00
Am-243	7.83E-02
Cm-244	3.53E+00
Cs-137	7.33E+02
Np-237	5.03E-03
Pu-238	1.72E-02
Pu-239	1.44E-03
Pu-240	1.91E-02
Pu-241	1.63E-01
Pu-242	1.09E-05
Sr-90	3.96E+02
Th-229	1.98E-10
Th-230	2.21E-10
Th-232	2.33E-16
U-233	5.71E-07
U-234	6.24E-06
U-235	5.45E-08
U-236	1.18E-06
U-238	1.45E-06

Haz. Waste No(s).

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

TRUCON Code(s)

321

Waste Stream Description

Sabotage Pieces consist of materials generated during repackaging of waste generated during research and development activities conducted on sabotage testing of model casks using simulated vitrified high-level waste. This waste stream consists primarily of iron-based metals.

Waste Stream ID: SR-BCLRH-T011

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Solidified Organics	Waste Matrix Code	S3212	Handling	RH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Hydraulic Room Sludge and Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.3	0.0	2.3
Current Form Total	2.3	0.0	2.3

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	7.90
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	23.60
Cellulosics	40.80
Rubber	7.90
Plastics	40.80
Cements	283.00
Inorganic Matrix	0.00
Organic Matrix	141.30
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.33E-02
Cm-244	4.61E-03
Cs-137	1.47E-01
Np-237	1.73E-08
Pu-238	7.67E-03
Pu-239	2.98E-03
Pu-240	2.11E-06
Sr-90	7.91E-02
Th-229	1.84E-17
Th-230	2.06E-10
Th-232	8.55E-24
U-233	1.47E-13
U-234	5.77E-06
U-235	1.18E-11
U-236	1.28E-13

Haz. Waste No(s).

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

TRUCON Code(s)

321

Waste Stream Description

Hydraulic Room Sludge and Debris waste consists of rubble, sludge, and absorbent materials as well as the plastic bags that the waste is in. The hydraulic sludge was absorbed using a greater than 50% No Char and Radsorb polymers. Then the hydraulic sludge was packed in plastic bags with additional No Char, Radsorb, and Floor Dry. Prior to packaging, 10 pounds of absorbent (50:50 Floor Dry and Radsorb) was added to the liner to absorb and water from condensation or dewatering.

Waste Stream ID: **SR-SWMF-HET-A**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU Debris (S5000)				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	58.2	25.0	83.2
Box - Steel	165.0	0.0	165.0
SLB2 (5' x 5' x 8) Dir Ld	5.7	0.0	5.7
SWB Dir Ld w/ Liner	9.5	0.0	9.5
Current Form Total	238.4	25.0	263.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	43.7	25.0	68.6
SLB2 (5' x 5' x 8) Dir Ld	503.7	0.0	503.7
SWB Dir Ld w/o Liner	9.5	0.0	9.5
TDOP w/ 10 - 55-gal Drums w/ Liners	31.5	0.0	31.5
Final Form Total	588.4	25.0	613.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.60
Aluminum-based Metals/Alloys	0.45
Other Metals	7.17
Other Inorganic Materials	0.07
Cellulosics	16.44
Rubber	3.81
Plastics	45.42
Cements	0.00
Inorganic Matrix	0.60
Organic Matrix	0.15
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	206.56
Packaging Material, Plastic	5.02
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.29E-01
Am-243	1.65E-04
Cm-244	2.04E-02
Cs-137	3.08E-02
Np-237	5.65E-05
Pu-238	1.22E+00
Pu-239	5.27E-01
Pu-240	1.16E-01
Pu-241	3.71E+00
Pu-242	1.60E-03
Sr-90	1.77E-01
U-233	1.07E-06
U-234	1.25E-03
U-235	2.17E-07
U-236	3.82E-07
U-238	1.88E-03

Haz. Waste No(s).

D008, F001, F002, F004, F005, F007, F009, U133, U151

TRUCON Code(s)

125/225

Waste Stream Description

CH Mixed TRU waste resulting from remediation and re-packaging of Mixed "defense related" TRU waste.

Waste Stream ID: **SR-SWMF-HET-RH**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Remote Handled (RH) Mixed TRU Debris (S5000)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	68.89
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	1033.33
Cements	0.00
Inorganic Matrix	275.56
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.06E-02
Am-243	5.19E-02
Cm-244	3.27E+00
Cs-137	4.20E-02
Np-237	5.30E-04
Pu-238	4.08E-01
Pu-239	2.59E-01
Pu-240	8.50E-02
Pu-241	1.48E+00
Pu-242	2.90E-05
Pu-244	1.69E-15
Sr-90	3.13E-02
Th-229	1.54E-11
Th-230	3.81E-09
Th-232	2.75E-16
U-233	2.75E-08
U-234	4.25E-05
U-235	7.47E-07
U-236	4.79E-07
U-238	1.60E-05

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

RH Mixed TRU waste resulting from solvent tank emptying and closure in the E-Area of SRS.

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **SR-SWMF-SOIL**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Soils	Waste Matrix Code	S4000	Handling	CH
Source Cat.	Spill Clean-ups/Emergency Response Actions	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU Waste Soil & Gravel			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.9	0.0	2.9
Current Form Total	2.9	0.0	2.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.9	0.0	2.9
Final Form Total	2.9	0.0	2.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.31
Cements	0.00
Inorganic Matrix	273.56
Organic Matrix	6.05
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.34E+00
Am-243	1.68E+00
Cm-244	5.77E+01
Np-237	1.23E-05
Pu-238	2.19E+00
Pu-239	4.78E-03
Pu-240	8.84E-01
Pu-241	3.14E-01
Pu-242	5.35E-04
Pu-244	1.28E-13
Th-229	6.58E-13
Th-230	2.54E-08
Th-232	4.07E-16
U-233	7.51E-10
U-234	1.95E-04
U-235	1.13E-10
U-236	6.30E-07
U-238	2.26E-12

No Hazardous Waste Numbers Provided

TRUCON Code(s)

111/211

Waste Stream Description

Burial Ground Soil and Gravel from spill cleanup / remediation activities.

Waste Stream ID: **SR-T001-221H-HEPA**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH HEPA filters	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - SRS Poly Box	16.5	0.0	16.5
SWB Dir Ld w/o Liner	28.4	47.3	75.6
Current Form Total	44.9	47.3	92.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/o Liner	28.4	47.3	75.6
Final Form Total	28.4	47.3	75.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	23.41
Aluminum-based Metals/Alloys	41.35
Other Metals	0.00
Other Inorganic Materials	4.68
Cellulosics	0.00
Rubber	0.00
Plastics	8.58
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.52E-03
Cs-137	4.99E-02
Np-237	3.72E-05
Pu-238	1.49E+00
Pu-239	3.88E-02
Pu-240	1.25E-02
Pu-241	1.83E-01
Pu-242	2.55E-06
Sr-90	2.83E-05
Th-229	2.31E-07
Th-230	9.94E-09
Th-232	2.51E-15
U-233	1.45E-04
U-234	1.03E-04
U-235	2.34E-07
U-236	2.99E-06
U-238	1.63E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s)

119/219

Waste Stream Description

This waste stream is defense related, contact handled non-mixed TRU and is composed of HEPA filters

Waste Stream ID: **SR-T003-773A-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	RH TRU Heterogeneous Debris from 773A			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	8.5	15.0	23.5
Cask - Misc	5.2	0.0	5.2
Current Form Total	13.7	15.0	28.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Fxd Lid w/ 3 - 55-gal w/ Liner	0.0	21.4	21.4
Final Form Total	0.0	21.4	21.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	229.83
Aluminum-based Metals/Alloys	0.00
Other Metals	29.25
Other Inorganic Materials	56.41
Cellulosics	31.34
Rubber	0.00
Plastics	52.23
Cements	0.00
Inorganic Matrix	0.29
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	525.40
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	464.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.00E+00
Am-243	4.84E-02
Cm-244	4.04E+00
Cs-137	1.05E+00
Np-237	9.15E-06
Pu-238	1.55E+00
Pu-239	1.57E-02
Pu-240	2.85E-02
Pu-241	1.18E-01
Pu-242	1.67E-05
Pu-244	8.23E-15
Sr-90	7.39E-01
Th-229	2.98E-10
Th-230	5.38E-09
Th-232	1.81E-15
U-233	2.44E-07
U-234	7.57E-05
U-235	2.25E-07
U-236	2.82E-06
U-238	8.94E-09

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

This waste consists of miscellaneous job control waste such as laboratory supplies used in research programs in the shielded cells, e.g. glassware, paper wipes, stainless steel samples vials, poly bottles, pipettes and small lab equipment (stirrers, heaters). In addition to the job control waste, this stream contains shavings from the cuttings of a Mark 16 fuel element.

Waste Stream ID: **SR-W026-221F-HEPA**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU HEPA Filters (S5000)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - SRS Poly Box	87.8	0.0	87.8
SWB Dir Ld w/o Liner	149.3	251.4	400.7
Current Form Total	237.1	251.4	488.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/o Liner	149.3	251.4	400.7
Final Form Total	149.3	251.4	400.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	16.85
Aluminum-based Metals/Alloys	29.76
Other Metals	0.00
Other Inorganic Materials	3.37
Cellulosics	0.00
Rubber	0.00
Plastics	6.18
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.49E-01
Cs-137	2.23E-07
Np-237	4.73E-07
Pu-238	3.78E-01
Pu-239	7.50E-01
Pu-240	1.75E-01
Pu-241	3.57E+00
Pu-242	6.39E-05
Sr-90	9.96E-13
Th-229	5.20E-15
Th-230	1.52E-09
Th-232	3.71E-17
U-233	1.25E-11
U-234	1.95E-05
U-235	1.26E-08
U-236	8.84E-08
U-238	1.61E-11

Haz. Waste No(s).

D022, D028, D029,
F001, F002, F003,
F005

TRUCON Code(s)

119/219

Waste Stream Description

HEPA Filters in Filtered Polyethylene Boxes

Waste Stream ID: SR-W026-221F-HET

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU/Thirds Heterogeneous debris from 221F			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	43.9	0.0	43.9
Box - SRS B-25 OP	43.2	0.0	43.2
Box - SRS Black Box	683.2	0.0	683.2
SLB2 (5' x 5' x 8) Dir Ld	84.9	0.0	84.9
SWB Dir Ld w/ Liner	88.8	0.0	88.8
TDOP Dir Ld	22.5	0.0	22.5
Current Form Total	966.5	0.0	966.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	32.9	0.0	32.9
SLB2 (5' x 5' x 8) Dir Ld	696.2	0.0	696.2
SWB Dir Ld w/o Liner	88.8	0.0	88.8
TDOP Dir Ld	22.5	0.0	22.5
TDOP w/ 10 - 55-gal Drums w/ Liners	27.0	0.0	27.0
Final Form Total	867.4	0.0	867.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	34.56
Aluminum-based Metals/Alloys	0.58
Other Metals	1.15
Other Inorganic Materials	6.01
Cellulosics	2.72
Rubber	8.72
Plastics	27.65
Cements	0.00
Inorganic Matrix	0.08
Organic Matrix	0.58
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	205.94
Packaging Material, Plastic	1.93
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.76E-01
Am-243	7.83E-07
Cm-244	1.32E-04
Cs-137	9.41E-04
Np-237	1.81E-06
Pu-238	1.82E-01
Pu-239	4.32E-01
Pu-240	9.94E-02
Pu-241	2.93E+00
Pu-242	2.26E-04
Sr-90	2.65E-04
Th-229	2.73E-08
Th-230	7.59E-10
Th-232	2.55E-17
U-233	9.70E-05
U-234	2.89E-05
U-235	7.71E-07
U-236	1.76E-07
U-238	9.03E-07

Haz. Waste No(s).

D006, D007, D008, D009, D022, D028, D029, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

200 Areas (F and H Separations Facilities). This waste is primarily solids consisting of mainly booties, lab coats, floor sweepings, rags, labware, and other job control wastes. Small HEPAs, liquids, sludges and resins may also be found in this stream. The waste is generated primarily through separation activities in the course of plutonium production, includes small amounts of TRU waste from on site laboratories.

Waste Stream ID: **SR-W026-221F-HET-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5300	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/o Liner	WP-SR-W026-221F-HE	2.3
SWB w/ 4 - 55-gal Drums w/ Liners	WP-SR-W026-221F-HE	28.4
SWB w/ 4 - 55-gal Drums w/o Liners	WP-SR-W026-221F-HE	3.8
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-SR-W026-221F-HE	540.0
Shipped Total		574.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	30.21
Aluminum-based Metals/Alloys	0.55
Other Metals	0.27
Other Inorganic Materials	6.69
Cellulosics	2.34
Rubber	8.09
Plastics	24.23
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.03
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.80E-01
Am-243	9.75E-08
Cm-244	1.33E-04
Cs-137	5.18E-07
Np-237	9.05E-06
Pu-238	5.55E-01
Pu-239	2.05E+00
Pu-240	5.73E-01
Pu-241	8.49E+00
Pu-242	6.80E-05
Sr-90	5.51E-07
Th-229	1.61E-14
Th-230	6.98E-09
Th-232	6.88E-08
U-233	1.15E-10
U-234	2.61E-04
U-235	3.03E-06
U-236	5.10E-08
U-238	2.25E-05

Haz. Waste No(s).

D006, D007, D008,
D009, D022, D028,
D029, F001, F002,
F003, F005

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **SR-W026-221F-HOM**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3113	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU Solids (S3000)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	5.2	0.0	5.2
Current Form Total	5.2	0.0	5.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	4.0	0.0	4.0
TDOP w/ 10 - 55-gal Drums w/ Liners	4.5	0.0	4.5
Final Form Total	8.5	0.0	8.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	2.71
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	2.71
Rubber	0.00
Plastics	8.12
Cements	0.00
Inorganic Matrix	229.96
Organic Matrix	27.05
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	184.57
Packaging Material, Plastic	26.40
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.47E-02
Cs-137	1.11E-06
Np-237	1.87E-07
Pu-238	8.02E-02
Pu-239	3.05E-01
Pu-240	5.91E-02
Pu-241	7.26E-01
Pu-242	7.22E-06
Sr-90	4.21E-12
Th-229	3.32E-15
Th-230	3.83E-10
Th-232	1.25E-17
U-233	6.33E-12
U-234	4.53E-06
U-235	5.65E-09
U-236	2.98E-08
U-238	1.41E-10

Haz. Waste No(s).

D022, D028, D029,
F001, F002, F003,
F005No TRUCON
Codes Provided

Waste Stream Description

Absorbed oil, neutralized acids / bases and water

Waste Stream ID: **SR-W026-772F-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU/Thirds Heterogeneous debris from 772F			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	132.1	28.7	160.8
Box - SRS B-25 OP	10.8	0.0	10.8
Box - Steel	37.6	0.0	37.6
SWB Dir Ld w/ Liner	11.3	0.0	11.3
Current Form Total	191.8	28.7	220.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	99.0	25.2	124.2
SLB2 (5' x 5' x 8) Dir Ld	175.5	0.0	175.5
SWB Dir Ld w/o Liner	11.3	0.0	11.3
TDOP w/ 10 - 55-gal Drums w/ Liners	72.0	0.0	72.0
Final Form Total	357.8	25.2	383.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	7.89
Aluminum-based Metals/Alloys	0.58
Other Metals	1.59
Other Inorganic Materials	15.92
Cellulosics	3.98
Rubber	2.97
Plastics	39.44
Cements	0.00
Inorganic Matrix	0.07
Organic Matrix	0.07
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	189.63
Packaging Material, Plastic	15.21
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.11E-01
Cm-244	5.39E-05
Cs-137	5.48E-03
Np-237	3.56E-04
Pu-238	1.71E+01
Pu-239	2.20E-01
Pu-240	5.62E-02
Pu-241	2.50E+00
Pu-242	5.86E-05
Sr-90	3.22E-03
Th-229	1.22E-09
Th-230	5.40E-08
Th-232	3.26E-16
U-233	4.32E-06
U-234	2.07E-03
U-235	2.26E-06
U-236	2.20E-06
U-238	7.30E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D028, D029, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combined waste from former W027-772F-HET and T001-772F-HET. This waste stream is defense related, contact handled TRU waste and is composed of Job Control waste, sludges and resins, HEPA filters and metal equipment.

Waste Stream ID: **SR-W026-772F-HET-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5300	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-SR-W026-772F-HE	1.5
55-gal Drum Dir Ld w/o Liner	WP-SR-W026-772F-HE	11.9
SWB w/ 4 - 55-gal Drums w/ Liners	WP-SR-W026-772F-HE	34.0
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-SR-W026-772F-HE	1372.5
Shipped Total		1419.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	4.12
Aluminum-based Metals/Alloys	0.32
Other Metals	0.34
Other Inorganic Materials	9.34
Cellulosics	2.27
Rubber	1.63
Plastics	21.65
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.29E-01
Am-243	5.62E-07
Cm-244	6.49E-05
Cs-137	4.32E-05
Np-237	9.44E-05
Pu-238	3.57E+00
Pu-239	2.32E-01
Pu-240	6.40E-02
Pu-241	1.14E+00
Pu-242	1.03E-05
Sr-90	3.82E-05
Th-229	1.84E-08
Th-230	1.64E-08
Th-232	3.20E-07
U-233	5.21E-05
U-234	6.24E-04
U-235	9.17E-07
U-236	5.69E-09
U-238	7.31E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D028, D029, F002, F003, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: SR-W027-221F-HET

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU/F listed solvents - Heterogeneous debris from 221F			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	134.0	0.0	134.0
Box - SRS Black Box	384.3	0.0	384.3
Box - Steel	52.8	0.0	52.8
Current Form Total	571.1	0.0	571.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	100.5	0.0	100.5
SLB2 (5' x 5' x 8) Dir Ld	464.1	0.0	464.1
TDOP w/ 10 - 55-gal Drums w/ Liners	72.0	0.0	72.0
Final Form Total	636.6	0.0	636.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	11.78
Aluminum-based Metals/Alloys	0.68
Other Metals	0.89
Other Inorganic Materials	4.77
Cellulosics	4.02
Rubber	10.08
Plastics	35.61
Cements	0.00
Inorganic Matrix	0.20
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	204.56
Packaging Material, Plastic	7.77
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.92E-01
Np-237	1.05E-06
Pu-238	1.63E+00
Pu-239	2.86E+00
Pu-240	6.73E-01
Pu-241	2.57E+01
Pu-242	2.16E-04
Th-229	1.05E-15
Th-230	3.40E-10
Th-232	7.88E-18
U-233	8.56E-12
U-234	1.88E-05
U-235	1.16E-08
U-236	7.98E-08
U-238	7.42E-09

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D018, D019, D022, D029, D039, D040, D043, F001, F002, F003, F005, U002, U151

TRUCON Code(s)

125/225

Waste Stream Description

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste. This stream differs from SR-W026 because solvent rags are suspected to be in the waste.

Waste Stream ID: SR-W027-221F-HETA-S

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5440	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-SR-W027-221F-HE	165.6
55-gal Drum Dir Ld w/o Liner	WP-SR-W027-221F-HE	6.2
SWB w/ 4 - 55-gal Drums w/ Liners	WP-SR-W027-221F-HE	217.4
SWB w/ 4 - 55-gal Drums w/o Liners	WP-SR-W027-221F-HE	1.9
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-SR-W027-221F-HE	1719.0
Shipped Total		2110.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	8.82
Aluminum-based Metals/Alloys	0.42
Other Metals	0.07
Other Inorganic Materials	4.62
Cellulosics	4.94
Rubber	3.55
Plastics	34.32
Cements	0.00
Inorganic Matrix	0.01
Organic Matrix	0.01
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.11E-01
Am-243	4.08E-08
Cs-137	1.06E-03
Np-237	4.47E-06
Pu-238	2.93E-01
Pu-239	9.61E-01
Pu-240	3.00E-01
Pu-241	5.56E+00
Pu-242	4.96E-05
Sr-90	1.32E-07
Th-229	2.69E-08
Th-230	4.32E-09
Th-232	5.08E-08
U-233	7.17E-05
U-234	1.22E-04
U-235	6.55E-08
U-236	3.56E-08
U-238	1.04E-06

Haz. Waste No(s).

D008, F001, F002, F003, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: SR-W027-221F-HOM

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3000	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU Absorbed / Stabilized Liquids			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	3.3	0.0	3.3
Current Form Total	3.3	0.0	3.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	3.3	0.0	3.3
Final Form Total	3.3	0.0	3.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.69
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	1.69
Rubber	0.00
Plastics	5.08
Cements	0.00
Inorganic Matrix	143.92
Organic Matrix	16.93
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.55E+00
Np-237	1.82E-05
Pu-238	2.42E+00
Pu-239	5.07E+00
Pu-240	1.19E+00
Pu-241	1.47E+01
Pu-242	2.06E-04
Th-229	7.68E-13
Th-230	2.59E-08
Th-232	6.36E-16
U-233	9.68E-10
U-234	2.06E-04
U-235	1.35E-07
U-236	9.53E-07
U-238	8.38E-13

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

CH Mixed TRU Absorbed / Stabilized Liquids

Waste Stream ID: **SR-W027-221H-HEPA**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH TRU HEPA filters	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - SRS Poly Box	49.1	0.0	49.1
SWB Dir Ld w/o Liner	20.8	160.7	181.4
Current Form Total	69.9	160.7	230.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/o Liner	162.5	0.0	162.5
Final Form Total	162.5	0.0	162.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	16.52
Aluminum-based Metals/Alloys	29.18
Other Metals	0.00
Other Inorganic Materials	3.30
Cellulosics	0.00
Rubber	0.00
Plastics	6.06
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.44E-03
Cs-137	1.11E-02
Np-237	1.11E-04
Pu-238	3.23E+01
Pu-239	3.50E-02
Pu-240	1.64E-02
Pu-241	7.83E-01
Pu-242	1.54E-05
Sr-90	3.70E-03
Th-229	2.24E-10
Th-230	5.63E-10
Th-232	1.20E-16
U-233	2.38E-06
U-234	1.09E-04
U-235	1.90E-07
U-236	2.44E-06
U-238	8.21E-09

Haz. Waste No(s).

D006, D008, D009, D019, D022, D029, D035, D039, D040, D043

TRUCON Code(s)

119/219

Waste Stream Description

This waste stream is defense related, contact handled mixed TRU and is composed of HEPA filters

Waste Stream ID: **SR-W027-221H-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU/F listed solvents - Heterogeneous debris from 221H			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	278.3	163.7	442.0
Box - FRP	10.7	0.0	10.7
Box - Steel	32.9	0.0	32.9
Cask - Misc	14.3	0.0	14.3
Cask - SRS CMISC	1.2	0.0	1.2
SWB Dir Ld w/ Liner	66.2	24.6	90.7
Current Form Total	403.5	188.3	591.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	208.8	151.0	359.8
SLB2 (5' x 5' x 8) Dir Ld	283.0	169.8	452.8
SWB Dir Ld w/o Liner	66.2	17.0	83.2
TDOP w/ 10 - 55-gal Drums w/ Liners	148.5	0.0	148.5
Final Form Total	706.5	337.8	1044.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.19
Aluminum-based Metals/Alloys	0.25
Other Metals	4.48
Other Inorganic Materials	2.78
Cellulosics	10.95
Rubber	19.66
Plastics	48.47
Cements	0.00
Inorganic Matrix	2.75
Organic Matrix	2.25
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	184.04
Packaging Material, Plastic	15.18
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.90E-02
Am-243	2.90E-07
Cs-137	1.83E-02
Np-237	5.33E-03
Pu-238	1.72E+02
Pu-239	6.75E-01
Pu-240	2.29E-01
Pu-241	4.27E+00
Pu-242	9.54E-05
Sr-90	7.99E-03
Th-229	1.56E-09
Th-230	4.37E-08
Th-232	5.40E-15
U-233	5.57E-06
U-234	2.36E-03
U-235	1.99E-05
U-236	3.64E-05
U-238	2.47E-06

Haz. Waste No(s).

D006, D008, D009, D019, D022, D029, D039, D040, D043, F001, F002, F003, F005, U133

TRUCON Code(s)

125/225

Waste Stream Description

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste. This stream differs from SR-W026 because solvent rags are suspected to be in the waste. Small HEPA filters, sludges, resins, absorbed liquids, and large metal equipment are also in these waste streams.

Waste Stream ID: **SR-W027-221H-HET-RH**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Remote Handled (RH) Mixed TRU Debris (S5000)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.5	0.0	2.5
Cask - Misc	2.6	0.0	2.6
Current Form Total	5.1	0.0	5.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	7.1	0.0	7.1
Final Form Total	7.1	0.0	7.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	4.91
Aluminum-based Metals/Alloys	1.04
Other Metals	18.54
Other Inorganic Materials	11.52
Cellulosics	45.30
Rubber	81.34
Plastics	200.57
Cements	0.00
Inorganic Matrix	11.36
Organic Matrix	9.29
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.39E-02
Np-237	2.74E-01
Pu-238	5.88E+01
Pu-239	6.30E-02
Pu-240	3.15E-02
Pu-241	4.37E-01
Pu-242	3.58E-05
Th-229	4.07E-08
Th-230	6.34E-07
Th-232	2.62E-15
U-233	3.22E-05
U-234	5.03E-03
U-235	1.38E-05
U-236	1.98E-06
U-238	6.21E-09

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

RH Mixed TRU waste resulting from maintenance / D&D operations from the HBL and H-Canyon facilities

Waste Stream ID: **SR-W027-221H-HET-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5440	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007	Activity Concentrations	Decayed to CY 2007
Stream Name	N/A						

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-SR-W027-221H-HE	5.0
55-gal Drum Dir Ld w/o Liner	WP-SR-W027-221H-HE	16.2
SWB w/ 4 - 55-gal Drums w/ Liners	WP-SR-W027-221H-HE	317.5
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-SR-W027-221H-HE	2529.0
TDOP w/ 10 - 55-gal Drums w/o Liners	WP-SR-W027-221H-HE	18.0
Shipped Total		2885.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	9.55
Aluminum-based Metals/Alloys	0.51
Other Metals	0.18
Other Inorganic Materials	4.01
Cellulosics	2.70
Rubber	7.33
Plastics	25.16
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.14E-02
Am-243	7.28E-06
Cm-244	2.87E-06
Cs-137	4.71E-06
Np-237	1.98E-04
Pu-238	2.13E+01
Pu-239	5.72E-02
Pu-240	1.91E-02
Pu-241	2.59E+00
Pu-242	1.12E-05
Sr-90	4.70E-06
Th-229	6.62E-08
Th-230	1.06E-07
Th-232	1.71E-06
U-233	2.36E-04
U-234	4.03E-03
U-235	9.85E-07
U-236	1.70E-09
U-238	1.23E-06

Haz. Waste No(s).

D006, D008, D009,
D019, D022, D029,
D039, D040, D043,
F001, F002, F003,
F005, U133

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: SR-W027-221H-HOM

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3000	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU Absorbed / Stabilized Liquids			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	12.19
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	12.19
Cements	0.00
Inorganic Matrix	219.38
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.42E-02
Cs-137	8.91E-03
Np-237	8.07E-07
Pu-238	1.27E+00
Pu-239	1.94E-01
Pu-240	1.01E-01
Pu-241	3.86E-01
Pu-242	3.14E-05
Th-229	2.26E-13
Th-230	6.29E-07
Th-232	1.31E-15
U-233	1.28E-10
U-234	2.64E-03
U-235	3.02E-05
U-236	1.02E-06
U-238	2.89E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

CH Mixed TRU Absorbed / Stabilized Liquids

Waste Stream ID: SR-W027-235F-HET

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU/F listed solvents - Heterogeneous debris from 235F			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	156.8	0.0	156.8
Box - SRS Black Box	42.7	0.0	42.7
Box - SRS Poly Box	21.1	0.0	21.1
Box - Steel	28.2	0.0	28.2
Cask - SRS CMISC	1.2	0.0	1.2
MSMS	13.3	0.0	13.3
SWB Dir Ld w/ Liner	28.4	0.0	28.4
Current Form Total	291.7	0.0	291.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	117.7	0.0	117.7
SLB2 (5' x 5' x 8) Dir Ld	277.3	0.0	277.3
SWB Dir Ld w/o Liner	88.8	0.0	88.8
TDOP w/ 10 - 55-gal Drums w/ Liners	85.5	0.0	85.5
Final Form Total	569.4	0.0	569.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	31.68
Aluminum-based Metals/Alloys	0.45
Other Metals	0.57
Other Inorganic Materials	5.32
Cellulosics	7.35
Rubber	14.37
Plastics	52.72
Cements	0.00
Inorganic Matrix	0.01
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	191.15
Packaging Material, Plastic	10.22
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.73E-02
Np-237	2.92E-03
Pu-238	1.60E+02
Pu-239	1.64E-01
Pu-240	8.08E-02
Pu-241	9.39E+00
Pu-242	2.16E-04
Th-229	5.83E-12
Th-230	9.41E-09
Th-232	2.37E-19
U-233	4.38E-08
U-234	9.79E-04
U-235	5.94E-08
U-236	4.79E-09
U-238	1.06E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D035, F002, F003

TRUCON Code(s)

122/222

Waste Stream Description

This waste stream is defense related contact handled mixed TRU waste. This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste, small HEPAs, liquids, sludges and resins may also be found in this stream..

Waste Stream ID: **SR-W027-235F-HET-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-SR-W027-235F-HE	1.2
55-gal Drum Dir Ld w/o Liner	WP-SR-W027-235F-HE	3.5
SWB w/ 4 - 55-gal Drums w/ Liners	WP-SR-W027-235F-HE	20.8
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-SR-W027-235F-HE	369.0
Shipped Total		394.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	17.32
Aluminum-based Metals/Alloys	0.36
Other Metals	0.44
Other Inorganic Materials	4.04
Cellulosics	3.89
Rubber	9.96
Plastics	27.11
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.31E-02
Am-243	1.33E-07
Cs-137	7.48E-07
Np-237	1.44E-03
Pu-238	2.14E+01
Pu-239	5.81E-02
Pu-240	3.14E-02
Pu-241	2.14E+00
Pu-242	1.72E-05
Sr-90	7.47E-07
Th-229	1.18E-12
Th-230	7.16E-08
Th-232	1.09E-06
U-233	1.26E-08
U-234	4.04E-03
U-235	3.00E-06
U-236	1.86E-09
U-238	6.41E-07

Haz. Waste No(s).

D004, D005, D006,
D007, D008, D009,
D010, D011, D018,
D019, D035, F002,
F003

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **SR-W027-235F-HOMO**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S3000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH mixed TRU S3000 solids from 235F			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	3.3	0.0	3.3
Current Form Total	3.3	0.0	3.3
Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	3.3	0.0	3.3
Final Form Total	3.3	0.0	3.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	3.50
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	3.50
Cellulosics	3.50
Rubber	3.50
Plastics	10.51
Cements	0.00
Inorganic Matrix	325.87
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.17E-01
Np-237	9.22E-07
Pu-238	2.29E+02
Pu-239	1.82E-01
Pu-240	9.89E-02
Pu-241	2.48E+00
Pu-242	1.17E-04
Th-229	1.39E-14
Th-230	8.13E-07
Th-232	1.86E-17
U-233	2.92E-11
U-234	1.11E-02
U-235	2.87E-09
U-236	4.70E-08
U-238	2.82E-13

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

This waste consists of sludge from tank cleanup.

Waste Stream ID: **SR-W027-773A-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU/F listed solvents - Heterogeneous debris from 773A			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	83.8	207.2	291.0
Box - FRP	3.3	0.0	3.3
Box - Misc	6.2	0.0	6.2
Box - SRS B-25 OP	7.2	0.0	7.2
Box - SRS Poly Box	2.9	0.0	2.9
Box - Steel	47.0	0.0	47.0
Cask - Misc	57.2	0.0	57.2
Cask - SRS CMISC	3.6	0.0	3.6
PMISC	4.9	0.0	4.9
Current Form Total	216.1	207.2	423.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	62.8	198.8	261.7
SLB2 (5' x 5' x 8) Dir Ld	0.0	515.1	515.1
SWB Dir Ld w/o Liner	0.0	7.6	7.6
TDOP w/ 10 - 55-gal Drums w/ Liners	0.0	45.0	45.0
Final Form Total	62.8	766.5	829.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	40.05
Aluminum-based Metals/Alloys	1.91
Other Metals	4.97
Other Inorganic Materials	19.77
Cellulosics	11.73
Rubber	6.89
Plastics	41.96
Cements	0.00
Inorganic Matrix	0.13
Organic Matrix	0.13
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	189.59
Packaging Material, Plastic	12.60
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.04E-02
Am-243	4.42E-03
Cm-244	4.08E-01
Cs-137	1.25E-01
Np-237	7.96E-05
Pu-238	3.32E+00
Pu-239	1.78E-01
Pu-240	4.31E-02
Pu-241	1.54E+00
Pu-242	1.77E-04
Pu-244	4.63E-16
Sr-90	9.01E-02
Th-229	1.76E-09
Th-230	3.09E-10
Th-232	1.31E-16
U-233	9.39E-06
U-234	2.66E-05
U-235	2.39E-07
U-236	1.33E-06
U-238	4.49E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D043, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

This waste stream is defense related contact handled mixed TRU waste. This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, other job control waste, small HEPAs liquids, sludges and resins may also be found in this waste.

Waste Stream ID: **SR-W027-773A-HET-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-SR-W027-773A-HE	0.8
55-gal Drum Dir Ld w/o Liner	WP-SR-W027-773A-HE	10.6
SWB w/ 4 - 55-gal Drums w/ Liners	WP-SR-W027-773A-HE	3.8
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-SR-W027-773A-HE	477.0
TDOP w/ 10 - 55-gal Drums w/o Liners	WP-SR-W027-773A-HE	13.5
Shipped Total		505.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	15.61
Aluminum-based Metals/Alloys	0.22
Other Metals	0.54
Other Inorganic Materials	9.15
Cellulosics	4.34
Rubber	2.64
Plastics	16.85
Cements	0.00
Inorganic Matrix	0.04
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.92E-02
Am-243	7.90E-04
Cm-244	4.30E-02
Cs-137	1.07E-04
Np-237	1.24E-04
Pu-238	5.83E+00
Pu-239	2.08E-01
Pu-240	4.99E-02
Pu-241	1.07E+00
Pu-242	5.65E-06
Sr-90	1.07E-04
Th-229	1.15E-09
Th-230	1.90E-08
Th-232	4.01E-07
U-233	6.11E-06
U-234	1.08E-03
U-235	5.78E-07
U-236	2.96E-09
U-238	8.03E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D043, F002, F003, F004, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **SR-W027-999-AGNS-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SR-AGNS-HET Debris	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	37.0	0.0	37.0
Current Form Total	37.0	0.0	37.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	27.9	0.0	27.9
TDOP w/ 10 - 55-gal Drums w/ Liners	18.0	0.0	18.0
Final Form Total	45.9	0.0	45.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	43.87
Aluminum-based Metals/Alloys	0.00
Other Metals	4.64
Other Inorganic Materials	32.62
Cellulosics	36.76
Rubber	9.44
Plastics	37.91
Cements	0.00
Inorganic Matrix	0.33
Organic Matrix	0.17
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	170.43
Packaging Material, Plastic	29.19
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.75E-02
Cs-137	2.64E-03
Np-237	5.63E-05
Pu-238	3.54E-02
Pu-239	6.88E-02
Pu-240	2.07E-02
Pu-241	2.90E-01
Pu-242	2.53E-06
Sr-90	1.84E-03
Th-229	8.32E-12
Th-230	1.47E-09
Th-232	1.11E-15
U-233	6.58E-09
U-234	7.52E-06
U-235	1.81E-07
U-236	8.38E-07
U-238	2.61E-09

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, D019, D022, D029, F002, F005

TRUCON Code(s)

125/225

Waste Stream Description

This waste is comprised of numerous organic and inorganic debris waste and generally consists of paper, cloth, wood, plastic, rubber, glass, and metal.

Waste Stream ID: SR-W027-999-AGNS-HOM

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SR-AGNS-HOM				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	3.3	0.0	3.3
Current Form Total	3.3	0.0	3.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	3.3	0.0	3.3
Final Form Total	3.3	0.0	3.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	61.52
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	816.06
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.10E-01
Np-237	5.18E-04
Pu-238	4.96E-01
Pu-239	1.04E+00
Pu-240	2.44E-01
Pu-241	3.02E+00
Pu-242	4.23E-05
Th-229	7.64E-11
Th-230	2.15E-08
Th-232	1.31E-16
U-233	6.05E-08
U-234	1.09E-04
U-235	3.35E-06
U-236	1.96E-07
U-238	7.11E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, F005

TRUCON Code(s)

111/211

Waste Stream Description

This waste is comprised of aqueous liquids solidified with lime and cement in a 55-gallon drum and aqueous liquid that had been absorbed using Florco-X and then later solidified with cement and water inside a 55-gallon drum.

Waste Stream ID: **SR-W027-999-LASL-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Source Information Not Compiled	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU Debris (S5000)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
30-gal Drum	22.1	0.0	22.1
Current Form Total	22.1	0.0	22.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	124.8	0.0	124.8
Final Form Total	124.8	0.0	124.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	10.23
Aluminum-based Metals/Alloys	0.15
Other Metals	0.18
Other Inorganic Materials	1.72
Cellulosics	2.37
Rubber	4.64
Plastics	16.81
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.18E-01
Np-237	5.82E-06
Pu-238	2.08E+02
Pu-239	1.93E-01
Pu-240	1.20E-01
Pu-241	2.25E+00
Pu-242	1.38E-04
Th-229	4.12E-13
Th-230	3.91E-06
Th-232	1.08E-16
U-233	4.02E-10
U-234	2.38E-02
U-235	6.68E-09
U-236	1.25E-07
U-238	7.29E-13

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste.

Waste Stream ID: SR-W027-999-LASL-HOM

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3000	Handling	CH
Source Cat.	Source Information Not Compiled	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU Solids (S3000)				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
30-gal Drum	5.1	0.0	5.1
Current Form Total	5.1	0.0	5.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	18.7	0.0	18.7
Final Form Total	18.7	0.0	18.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.73
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	15.88
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.33E+00
Np-237	1.25E-05
Pu-238	6.27E+02
Pu-239	5.82E-01
Pu-240	3.35E-01
Pu-241	4.73E+00
Pu-242	3.92E-04
Th-229	8.93E-13
Th-230	1.18E-05
Th-232	3.01E-16
U-233	8.68E-10
U-234	7.17E-02
U-235	2.01E-08
U-236	3.48E-07
U-238	2.07E-12

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Plutonium Oxide Scrap

Waste Stream ID: **SR-W027-999-MD-HET**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU/F listed solvents - Heterogeneous debris from offsite			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	176.4	0.0	176.4
83-gal Drum	18.9	0.0	18.9
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	11.9	0.0	11.9
Box - Misc	117.8	0.0	117.8
Box - Steel	343.2	0.0	343.2
SWB Dir Ld w/ Liner	30.2	0.0	30.2
Current Form Total	698.4	0.0	698.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	65.9	0.0	65.9
SLB2 (5' x 5' x 8) Dir Ld	0.0	1245.2	1245.2
SWB Dir Ld w/o Liner	30.2	0.0	30.2
TDOP w/ 10 - 55-gal Drums w/ Liners	0.0	306.0	306.0
Final Form Total	96.2	1551.2	1647.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	58.80
Aluminum-based Metals/Alloys	1.44
Other Metals	2.52
Other Inorganic Materials	5.66
Cellulosics	0.78
Rubber	1.15
Plastics	2.66
Cements	0.00
Inorganic Matrix	17.50
Organic Matrix	1.20
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	214.60
Packaging Material, Plastic	3.18
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.04E-02
Cm-244	3.14E-07
Cs-137	1.31E-08
Np-237	8.33E-07
Pu-238	8.42E+01
Pu-239	8.32E-02
Pu-240	4.44E-02
Pu-241	4.77E-01
Pu-242	5.06E-05
Pu-244	9.67E-19
Th-229	2.75E-08
Th-230	1.59E-06
Th-232	3.99E-17
U-233	8.39E-06
U-234	9.63E-03
U-235	4.69E-08
U-236	4.62E-08
U-238	9.76E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D030, D032, D034, D037, D043, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste.

Waste Stream ID: **SR-W027-999-MD-HOM-A**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3113	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU Solids (S3000)				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	1.7	0.0	1.7
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	1.0	0.0	1.0
Current Form Total	2.6	0.0	2.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.7	0.0	2.7
Final Form Total	2.7	0.0	2.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	7.63
Aluminum-based Metals/Alloys	0.00
Other Metals	11.40
Other Inorganic Materials	25.05
Cellulosics	3.04
Rubber	0.09
Plastics	19.53
Cements	0.00
Inorganic Matrix	149.87
Organic Matrix	4.94
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.00E-02
Np-237	3.38E-05
Pu-238	3.65E+01
Pu-239	2.57E-02
Pu-240	2.06E-03
Pu-241	2.57E-02
Th-229	5.73E-12
Th-230	6.61E-07
Th-232	1.27E-18
U-233	4.23E-09
U-234	4.16E-03
U-235	3.98E-07
U-236	1.77E-09

Haz. Waste No(s).

D006, D007, D008

No TRUCON Codes Provided

Waste Stream Description

Aqueous liquids absorbed in polyethylene bottles.

Waste Stream ID: SR-W027-999-MD-HOM-B

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3121	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU Solids (S3000)	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Steel	4.2	0.0	4.2
Current Form Total	4.2	0.0	4.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
SLB2 (5' x 5' x 8) Dir Ld	22.6	0.0	22.6
Final Form Total	22.6	0.0	22.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.74
Aluminum-based Metals/Alloys	0.00
Other Metals	1.11
Other Inorganic Materials	2.44
Cellulosics	0.30
Rubber	0.01
Plastics	1.90
Cements	0.00
Inorganic Matrix	14.60
Organic Matrix	0.48
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	216.30
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.95E-04
Np-237	2.21E-08
Pu-238	9.16E-03
Th-229	3.57E-15
Th-230	1.15E-10
U-233	2.67E-12
U-234	8.47E-07

Haz. Waste No(s).

D004, D006, D007,
D008, D009, D011,
F002, F003, F006,
F007, F009

No TRUCON
Codes Provided

Waste Stream Description

Waste water treatment sludge.

Waste Stream ID: **SR-W027-999-MD-HOM-C**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3000	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU Solids (S3000)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.3	0.0	0.3
Current Form Total	0.9	0.0	0.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.6	0.4	1.0
Final Form Total	0.6	0.4	1.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	5.40
Aluminum-based Metals/Alloys	0.00
Other Metals	8.06
Other Inorganic Materials	17.73
Cellulosics	2.15
Rubber	0.06
Plastics	13.82
Cements	0.00
Inorganic Matrix	106.06
Organic Matrix	3.50
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.68E-04
Np-237	6.42E-09
Pu-238	2.00E-01
Pu-239	7.92E-05
Pu-242	4.25E-09
Th-229	3.71E-16
Th-230	2.50E-09
U-233	4.08E-13
U-234	1.85E-05
U-235	2.26E-12
U-238	9.50E-18

Haz. Waste No(s).

D004, D006, D007, D008, D009, D011, F002, F003

No TRUCON Codes Provided

Waste Stream Description

Not yet incorporated into an AK Report

Waste Stream ID: **SR-W027-999-MD-SOIL**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Soils	Waste Matrix Code	S4200	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU Soil / Gravel (S4000)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.9	0.0	2.9
Box - Steel	18.4	0.0	18.4
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Current Form Total	23.2	0.0	23.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	0.8	0.0	0.8
SLB2 (5' x 5' x 8) Dir Ld	0.0	79.2	79.2
SWB Dir Ld w/o Liner	1.9	0.0	1.9
TDOP w/ 10 - 55-gal Drums w/ Liners	0.0	4.5	4.5
Final Form Total	2.7	83.7	86.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.20
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	3.95
Soils/gravel	178.72
Vitrified	0.00
Packaging Material, Steel	214.91
Packaging Material, Plastic	0.89
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.42E-04
Cs-137	8.33E-08
Np-237	4.30E-07
Pu-238	5.47E-02
Pu-239	1.87E-03
Pu-242	3.54E-11
Th-229	7.34E-14
Th-230	6.85E-10
U-233	5.41E-11
U-234	5.06E-06
U-235	5.34E-11
U-238	7.92E-20

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F002, F003, F004, F005, F007, F009

TRUCON Code(s)

111/211

Waste Stream Description

Soil mixed with absorbant and some commingled debris.

Waste Stream ID: **SR-W027-FB-PRE86-C-S**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5300	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Shipped Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	WP-SR-W027-FB-PRE8	177.0
55-gal Drum Dir Ld w/o Liner	WP-SR-W027-FB-PRE8	20.4
SWB w/ 4 - 55-gal Drums w/ Liners	WP-SR-W027-FB-PRE8	347.8
TDOP w/ 10 - 55-gal Drums w/ Liners	WP-SR-W027-FB-PRE8	2020.5
Shipped Total		2565.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	11.74
Aluminum-based Metals/Alloys	0.12
Other Metals	0.12
Other Inorganic Materials	3.84
Cellulosics	4.44
Rubber	3.88
Plastics	31.17
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.01
Soils/gravel	0.00
Vitrified	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.16E-01
Am-243	6.11E-08
Cm-244	2.33E-04
Cs-137	2.43E-07
Np-237	2.21E-05
Pu-238	1.19E-01
Pu-239	1.16E+00
Pu-240	2.76E-01
Pu-241	4.17E+00
Pu-242	7.37E-05
Sr-90	2.30E-07
Th-229	9.15E-10
Th-230	1.23E-09
Th-232	3.84E-08
U-233	3.25E-06
U-234	4.61E-05
U-235	6.96E-08
U-236	2.46E-08
U-238	3.68E-07

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D018, D019, D022, D029, D039, D040, D043, F001, F002, F003, F005, U002, U151

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **SR-W027-HBL-Box-A**

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH mixed TRU from 221H	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - SRS B-25 OP	28.8	0.0	28.8
Box - SRS Black Box	256.2	0.0	256.2
SLB2 (5' x 5' x 8) Dir Ld	956.5	1205.6	2162.1
Current Form Total	1241.5	1205.6	2447.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
SLB2 (5' x 5' x 8) Dir Ld	956.5	1205.6	2162.1
Final Form Total	956.5	1205.6	2162.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	78.30
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	6.53
Rubber	6.53
Plastics	39.15
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	216.30
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.32E-03
Cs-137	6.54E-05
Np-237	1.14E-04
Pu-238	7.72E+00
Pu-239	6.20E-03
Pu-240	3.37E-03
Pu-241	8.05E-02
Pu-242	3.98E-06
Sr-90	4.59E-05
Th-229	6.70E-12
Th-230	3.12E-08
Th-232	7.14E-19
U-233	8.41E-09
U-234	3.99E-04
U-235	1.04E-10
U-236	1.70E-09
U-238	1.02E-14

Haz. Waste No(s).

D006, D007, D008, D009

No TRUCON Codes Provided

Waste Stream Description

This waste stream has been separated from its parent waste stream SR-W027-HBL-Box because a small fraction of the parent waste stream contains sensitive waste. Waste Stream SR-W027-HBL-Box-A contains no sensitive waste. This waste stream is defense related debris consisting of large equipment and job control waste packaged in large steel boxes

Waste Stream ID: SR-W027-SRSG-HET

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU Debris (S5000)				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	7.9	161.8	169.7
Box - SRS B-25 OP	7.2	0.0	7.2
SWB Dir Ld w/ Liner	3.8	0.0	3.8
Current Form Total	18.9	161.8	180.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	5.8	155.4	161.2
SLB2 (5' x 5' x 8) Dir Ld	0.0	11.3	11.3
SWB Dir Ld w/o Liner	3.8	0.0	3.8
TDOP w/ 10 - 55-gal Drums w/ Liners	0.0	4.5	4.5
Final Form Total	9.6	171.2	180.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	45.16
Aluminum-based Metals/Alloys	45.16
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	5.64
Rubber	5.64
Plastics	11.29
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	139.14
Packaging Material, Plastic	33.41
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.41E-01
Am-243	3.58E-07
Cm-244	1.03E-05
Cs-137	3.40E-04
Np-237	9.14E-05
Pu-238	3.72E+00
Pu-239	2.21E-01
Pu-240	5.20E-02
Pu-241	5.15E+00
Pu-242	1.15E-05
Sr-90	9.68E-03
Th-229	9.46E-10
Th-230	5.49E-08
Th-232	4.66E-15
U-233	3.42E-07
U-234	3.75E-04
U-235	2.68E-07
U-236	3.17E-06
U-238	8.82E-08

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Mixed CH TRU Debris from waste remediation activities and burial ground operations

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: SR-W027-SRSG-HET-RH

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	RH Mixed TRU Debris (S5000)			Activity Concentrations Decayed to CY	2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - SRS Poly Box	0.2	0.0	0.2
SWB Dir Ld w/o Liner	5.7	0.0	5.7
Current Form Total	5.9	0.0	5.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	0.0	14.2	14.2
Final Form Total	0.0	14.2	14.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	470.00
Aluminum-based Metals/Alloys	235.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	78.33
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.80E-01
Am-243	2.78E-06
Cm-244	2.03E-02
Cs-137	1.94E-03
Np-237	4.13E-06
Pu-238	4.17E+01
Pu-239	7.89E-01
Pu-240	4.76E-01
Pu-241	6.46E+00
Pu-242	7.94E-04
Sr-90	2.29E-03
Th-229	1.50E-13
Th-230	5.62E-07
Th-232	3.14E-16
U-233	2.00E-10
U-234	4.01E-03
U-235	2.34E-08
U-236	4.24E-07
U-238	3.83E-10

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream currently consists of 3 Pu / Be neutron sources and one 2'X2'X1' HEPA filter from the F-Tank farm.

Waste Stream ID: SR-W027-SRSG-HOM

Appendix A

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3000	Handling	CH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH Mixed TRU Solids (S3000)				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	15.6	0.0	15.6
SWB w/ 4 - 55-gal Drums w/ Liners	3.8	0.0	3.8
Current Form Total	19.4	0.0	19.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	11.6	0.0	11.6
SWB w/ 4 - 55-gal Drums w/ Liners	3.8	0.0	3.8
TDOP w/ 10 - 55-gal Drums w/ Liners	0.0	9.0	9.0
Final Form Total	15.4	9.0	24.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	2.60
Cements	257.80
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	180.44
Packaging Material, Plastic	26.47
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.75E-01
Am-243	5.45E-05
Cm-244	7.48E-04
Cs-137	4.90E-05
Np-237	4.71E-03
Pu-238	2.87E+01
Pu-239	2.00E+00
Pu-240	2.73E-01
Pu-241	2.85E+00
Pu-242	2.01E-02
Sr-90	5.02E-06
Th-229	5.47E-05
Th-230	1.23E-05
Th-232	1.99E-13
U-233	1.95E-02
U-234	4.69E-02
U-235	3.55E-05
U-236	1.34E-04
U-238	2.13E-03

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Inorganic particulate from CIF stabilized with concrete and sludge material from D&D work in "F" area.

APPENDIX B: Emplaced Waste

The following waste stream profiles contain information on waste streams emplaced in the WIPP as of the inventory date, December 31, 2007.

The TRU waste sites that have shipped TRU waste to the WIPP are:

Argonne National Laboratory – East	AE
Idaho National Laboratory	IN
Los Alamos National Laboratory	LA
Lawrence Livermore National Laboratory	LL
Nevada Test Site	NT
Rocky Flats Environmental Technology Site	RF
Hanford (Richland)	RL
Savannah River Site	SR

Waste Stream ID: **WP-AECHDM**

Appendix B

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - East	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	AECHDM-S	56.6
55-gal Drum Dir Ld w/o Liner	AECHDM-S	0.2
TDOP w/ 10 - 55-gal Drums w/ Liners	AECHDM-S	45.0
Emplaced Total		101.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	78.91
Aluminum-based Metals/Alloys	1.45
Other Metals	6.32
Other Inorganic Materials	6.55
Cellulosics	5.70
Rubber	11.27
Plastics	41.18
Cements	0.00
Inorganic Matrix	1.94
Organic Matrix	0.91
Soils/gravel	0.11
Vitrified	0.00
Packaging Material, Steel	175.45
Packaging Material, Plastic	28.13
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.34E-01
Am-243	1.85E-02
Cm-244	1.14E-03
Cs-137	1.74E-02
Np-237	1.20E-03
Pu-238	6.28E-01
Pu-239	8.40E-01
Pu-240	6.35E-01
Pu-241	8.84E-01
Pu-242	2.57E-04
Pu-244	3.26E-19
Sr-90	1.82E-02
Th-229	8.39E-05
Th-230	2.78E-08
Th-232	7.44E-18
U-233	4.13E-04
U-234	7.77E-04
U-235	1.47E-05
U-236	7.53E-08
U-238	4.33E-04

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **WP-AECHHM**

Appendix B

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - East	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3110	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	AECHHM-S	9.4
TDOP w/ 10 - 55-gal Drums w/ Liners	AECHHM-S	4.5
Emplaced Total		13.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	355.56
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	163.59
Packaging Material, Plastic	30.54
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.06E+00
Am-243	3.71E-04
Cs-137	1.00E-04
Np-237	1.23E-04
Pu-238	3.21E-01
Pu-239	2.98E+00
Pu-240	1.19E+00
Pu-241	5.55E-13
Pu-242	1.46E-04
Sr-90	1.05E-04
Th-229	2.32E-05
Th-230	1.39E-08
Th-232	1.39E-17
U-233	2.09E-09
U-234	3.88E-04
U-235	7.62E-06
U-236	1.41E-07
U-238	1.94E-04

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

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

Appendix B

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - East	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
TDOP w/ 10 - 55-gal Drums w/ Liners	MU-W002-S	4.5
Emplaced Total		4.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	7.11
Aluminum-based Metals/Alloys	2.31
Other Metals	0.02
Other Inorganic Materials	2.91
Cellulosics	0.11
Rubber	0.00
Plastics	2.84
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	231.80
Packaging Material, Plastic	17.10
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.56E+00
Am-243	2.53E-04
Cs-137	3.71E-07
Np-237	8.57E-04
Pu-239	5.04E-03
Sr-90	3.87E-07
Th-229	2.44E-04
Th-230	7.66E-16
U-233	1.45E-08
U-234	4.26E-11
U-235	1.99E-11
U-238	3.85E-06

Haz. Waste No(s).

D006, D011

No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-BN004**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3150	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	BN004-S	7.1
SWB w/ 4 - 55-gal Drums w/ Liners	BN004-S	245.7
TDOP w/ 10 - 55-gal Drums w/ Liners	BN004-S	81.0
Emplaced Total		333.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.02
Aluminum-based Metals/Alloys	0.00
Other Metals	0.01
Other Inorganic Materials	2.44
Cellulosics	0.03
Rubber	0.01
Plastics	1.83
Cements	0.00
Inorganic Matrix	488.47
Organic Matrix	1.44
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	214.42
Packaging Material, Plastic	16.93
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.08E+00
Cm-244	5.02E-03
Cs-137	7.39E-06
Np-237	5.15E-04
Pu-238	1.49E-01
Pu-239	3.63E+00
Pu-240	8.23E-01
Pu-241	6.83E+00
Pu-242	7.47E-05
Sr-90	1.25E-05
Th-229	1.37E-07
Th-230	5.91E-10
Th-232	2.41E-18
U-233	7.28E-04
U-234	3.33E-05
U-235	7.47E-06
U-236	4.88E-08
U-238	5.76E-06

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-BN161**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	BN161-S	0.6
SWB w/ 4 - 55-gal Drums w/ Liners	BN161-S	3.8
TDOP w/ 10 - 55-gal Drums w/ Liners	BN161-S	54.0
Emplaced Total		58.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.41
Aluminum-based Metals/Alloys	0.00
Other Metals	0.08
Other Inorganic Materials	135.39
Cellulosics	10.80
Rubber	0.00
Plastics	2.19
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	229.38
Packaging Material, Plastic	17.26
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.34E-01
Np-237	1.04E-05
Pu-238	1.68E-01
Pu-239	4.00E+00
Pu-240	9.15E-01
Pu-241	6.30E+00
Pu-242	7.38E-05
Th-229	8.20E-15
Th-230	1.48E-11
Th-232	2.68E-18
U-233	8.82E-11
U-234	1.30E-06
U-235	5.46E-08
U-236	5.42E-08
U-238	2.23E-14

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-BN211**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	BN211-S	8.7
SWB w/ 4 - 55-gal Drums w/ Liners	BN211-S	54.8
TDOP w/ 10 - 55-gal Drums w/ Liners	BN211-S	459.0
Emplaced Total		522.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.30
Aluminum-based Metals/Alloys	1.80
Other Metals	0.41
Other Inorganic Materials	77.01
Cellulosics	26.02
Rubber	0.02
Plastics	4.13
Cements	0.00
Inorganic Matrix	0.28
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	227.94
Packaging Material, Plastic	17.35
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.22E-01
Am-243	9.80E-09
Cs-137	2.61E-09
Np-237	4.88E-05
Pu-238	1.68E-01
Pu-239	3.96E+00
Pu-240	9.14E-01
Pu-241	6.06E+00
Pu-242	7.63E-05
Sr-90	4.42E-09
Th-229	1.09E-08
Th-230	1.07E-10
Th-232	2.68E-18
U-233	5.82E-05
U-234	6.45E-06
U-235	1.21E-06
U-236	5.42E-08
U-238	8.80E-09

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-BN243**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5122	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	BN243-S	2.9
SWB w/ 4 - 55-gal Drums w/ Liners	BN243-S	7.6
TDOP w/ 10 - 55-gal Drums w/ Liners	BN243-S	139.5
Emplaced Total		150.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.05
Aluminum-based Metals/Alloys	0.00
Other Metals	4.29
Other Inorganic Materials	93.81
Cellulosics	0.09
Rubber	0.14
Plastics	14.44
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	228.80
Packaging Material, Plastic	17.45
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.71E-01
Cm-244	8.38E-03
Cs-137	9.24E-10
Np-237	1.76E-05
Pu-238	3.76E-02
Pu-239	7.89E-01
Pu-240	1.77E-01
Pu-241	1.26E+00
Pu-242	1.77E-05
Sr-90	1.56E-09
Th-229	1.43E-14
Th-230	1.11E-10
Th-232	5.20E-19
U-233	1.52E-10
U-234	6.26E-06
U-235	1.61E-06
U-236	1.05E-08
U-238	5.33E-15

Haz. Waste No(s).

D005, D008, D009,
D022, D028, D029,
F001, F002, F005No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-BN252**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5311	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	BN252-S	16.6
SWB w/ 4 - 55-gal Drums w/ Liners	BN252-S	58.6
TDOP w/ 10 - 55-gal Drums w/ Liners	BN252-S	103.5
Emplaced Total		178.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.03
Aluminum-based Metals/Alloys	0.00
Other Metals	30.92
Other Inorganic Materials	2.38
Cellulosics	0.11
Rubber	237.57
Plastics	1.54
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	215.61
Packaging Material, Plastic	18.69
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.00E+00
Cs-137	2.44E-09
Np-237	3.43E-04
Pu-238	2.23E-01
Pu-239	6.36E+00
Pu-240	1.37E+00
Pu-241	1.25E+01
Pu-242	1.48E-04
Sr-90	3.88E-09
Th-229	2.80E-13
Th-230	6.03E-11
Th-232	4.00E-18
U-233	2.99E-09
U-234	3.99E-06
U-235	1.32E-06
U-236	8.11E-08
U-238	4.48E-14

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-BN296**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Lead/Cadmium Metal Waste	Waste Matrix Code	S5112	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	BN296-S	32.0
SWB w/ 4 - 55-gal Drums w/ Liners	BN296-S	28.4
TDOP w/ 10 - 55-gal Drums w/ Liners	BN296-S	414.0
Emplaced Total		474.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	81.20
Aluminum-based Metals/Alloys	0.39
Other Metals	100.88
Other Inorganic Materials	3.05
Cellulosics	2.81
Rubber	0.62
Plastics	1.55
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	223.74
Packaging Material, Plastic	18.40
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.45E+00
Cm-244	2.52E-03
Cs-137	1.92E-08
Np-237	8.31E-05
Pu-238	1.80E-01
Pu-239	3.75E+00
Pu-240	8.35E-01
Pu-241	5.63E+00
Pu-242	8.42E-05
Sr-90	3.44E-08
Th-229	2.23E-09
Th-230	4.55E-11
Th-232	2.44E-18
U-233	1.19E-05
U-234	3.04E-06
U-235	2.11E-03
U-236	4.95E-08
U-238	1.42E-06

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-BN304**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	BN304-S	4.8
SWB w/ 4 - 55-gal Drums w/ Liners	BN304-S	20.8
TDOP w/ 10 - 55-gal Drums w/ Liners	BN304-S	279.0
Emplaced Total		304.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	17.05
Aluminum-based Metals/Alloys	0.03
Other Metals	24.82
Other Inorganic Materials	4.74
Cellulosics	5.09
Rubber	8.27
Plastics	6.55
Cements	0.00
Inorganic Matrix	0.01
Organic Matrix	0.00
Soils/gravel	0.09
Vitrified	0.00
Packaging Material, Steel	228.80
Packaging Material, Plastic	17.36
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.77E-01
Cs-137	1.36E-06
Np-237	7.92E-06
Pu-238	5.05E+01
Pu-239	1.00E-01
Pu-240	7.54E-02
Pu-241	8.19E-01
Pu-242	6.37E-05
Sr-90	2.76E-06
Th-229	6.42E-15
Th-230	2.73E-09
Th-232	2.21E-19
U-233	6.86E-11
U-234	2.96E-04
U-235	1.42E-07
U-236	4.47E-09
U-238	7.84E-05

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-BN510**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
100-gal Drum Dir Ld w/o Liner	BN510-S	4064.8
Emplaced Total		4064.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	371.03
Aluminum-based Metals/Alloys	2.13
Other Metals	3.77
Other Inorganic Materials	19.66
Cellulosics	154.15
Rubber	9.34
Plastics	151.85
Cements	0.00
Inorganic Matrix	0.03
Organic Matrix	0.09
Soils/gravel	0.02
Vitrified	0.00
Packaging Material, Steel	113.70
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.58E-01
Cs-137	1.16E-07
Np-237	1.49E-05
Pu-238	1.60E-01
Pu-239	1.52E+00
Pu-240	3.28E-01
Pu-241	2.48E+00
Pu-242	2.93E-05
Sr-90	1.94E-07
Th-229	3.99E-10
Th-230	2.27E-09
Th-232	2.40E-19
U-233	4.25E-06
U-234	2.53E-04
U-235	2.47E-04
U-236	9.72E-09
U-238	6.34E-06

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-BN835**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3113	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	BN835-S	18.7
SWB w/ 4 - 55-gal Drums w/ Liners	BN835-S	15.1
TDOP w/ 10 - 55-gal Drums w/ Liners	BN835-S	994.5
Emplaced Total		1028.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.02
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.70
Cellulosics	0.91
Rubber	0.01
Plastics	0.55
Cements	0.00
Inorganic Matrix	239.18
Organic Matrix	0.08
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	229.66
Packaging Material, Plastic	17.45
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.98E-02
Cs-137	8.67E-08
Np-237	6.13E-06
Pu-238	1.67E+00
Pu-239	3.30E-03
Pu-240	2.12E-03
Pu-241	3.70E-02
Pu-242	2.14E-06
Sr-90	1.51E-07
Th-229	5.00E-15
Th-230	8.67E-11
Th-232	6.21E-21
U-233	5.33E-11
U-234	9.59E-06
U-235	1.37E-10
U-236	1.26E-10
U-238	2.08E-07

Haz. Waste No(s).

D007, D008, D009,
F001, F002**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-BN836**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3121	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	BN836-S	43.9
SWB w/ 4 - 55-gal Drums w/ Liners	BN836-S	1625.4
Emplaced Total		1669.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.01
Other Inorganic Materials	0.11
Cellulosics	0.09
Rubber	0.00
Plastics	0.19
Cements	0.00
Inorganic Matrix	552.27
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	208.99
Packaging Material, Plastic	16.84
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.38E-03
Cs-137	2.06E-07
Np-237	1.30E-06
Pu-238	1.07E+00
Pu-239	1.62E-03
Pu-240	1.11E-03
Pu-241	5.28E-03
Pu-242	1.27E-06
Sr-90	3.38E-07
Th-229	2.67E-16
Th-230	1.51E-11
Th-232	8.11E-22
U-233	5.69E-12
U-234	3.20E-06
U-235	1.96E-08
U-236	3.28E-11
U-238	8.04E-09

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-BNINW216**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3121	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	BNINW216-S	142.9
SWB w/ 4 - 55-gal Drums w/ Liners	BNINW216-S	759.8
TDOP w/ 10 - 55-gal Drums w/ Liners	BNINW216-S	3564.0
Emplaced Total		4466.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.03
Aluminum-based Metals/Alloys	0.00
Other Metals	0.06
Other Inorganic Materials	5.04
Cellulosics	0.01
Rubber	0.02
Plastics	0.49
Cements	0.00
Inorganic Matrix	394.36
Organic Matrix	0.28
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	225.05
Packaging Material, Plastic	17.60
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.70E+00
Cs-137	2.01E-08
Np-237	7.78E-05
Pu-238	3.92E-02
Pu-239	3.84E-01
Pu-240	9.74E-02
Pu-241	1.10E+00
Pu-242	5.12E-05
Sr-90	3.28E-08
Th-229	6.12E-14
Th-230	7.12E-10
Th-232	2.85E-19
U-233	6.59E-10
U-234	3.97E-05
U-235	7.06E-06
U-236	5.77E-09
U-238	4.06E-04

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-BNINW218**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3121	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
SWB w/ 4 - 55-gal Drums w/ Liners	BNINW218-S	39.7
TDOP w/ 10 - 55-gal Drums w/ Liners	BNINW218-S	409.5
Emplaced Total		449.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.03
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	33.65
Cellulosics	0.01
Rubber	0.01
Plastics	2.88
Cements	0.00
Inorganic Matrix	347.69
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	229.97
Packaging Material, Plastic	17.03
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.47E-02
Cs-137	2.27E-08
Np-237	5.81E-04
Pu-238	5.07E-03
Pu-239	9.99E-02
Pu-240	2.06E-02
Pu-241	1.98E-01
Pu-242	3.01E-06
Sr-90	3.70E-08
Th-229	1.07E-12
Th-230	1.01E-09
Th-232	1.36E-19
U-233	7.60E-09
U-234	3.73E-05
U-235	3.98E-06
U-236	1.83E-09
U-238	3.15E-04

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-ID-ANLE-S5000**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	RH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	ID-ANLE-S5000-S	82.8
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	ID-ANLE-S5000-S	5.3
Emplaced Total		88.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	92.02
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	24.42
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.72E-01
Cs-137	3.30E+00
Pu-238	9.28E-02
Pu-239	3.32E-01
Pu-240	1.75E-01
Pu-241	2.71E+00
Pu-242	9.99E-03
Sr-90	2.48E+00
U-233	8.65E-04
U-234	1.07E-03
U-235	3.80E-05
U-238	6.43E-06

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

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

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3111	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/o Liner	ID-RF-BNL-ASH-S	0.2
Emplaced Total		0.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	9.62
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	37.02
Cellulosics	0.00
Rubber	0.00
Plastics	7.69
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.95E-01
Np-237	9.06E-06
Pu-238	1.18E-01
Pu-239	3.52E+00
Pu-240	8.08E-01
Pu-241	5.01E+00
Pu-242	6.47E-05
Th-229	7.16E-15
Th-230	6.07E-12
Th-232	2.37E-18
U-233	7.70E-11
U-234	6.74E-07
U-235	6.94E-09
U-236	4.79E-08
U-238	1.95E-14

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

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

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Organics	Waste Matrix Code	S3114	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
SWB w/ 4 - 55-gal Drums w/ Liners	ID-RF-S3114-S	35.9
TDOP w/ 10 - 55-gal Drums w/ Liners	ID-RF-S3114-S	238.5
Emplaced Total		274.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.08
Aluminum-based Metals/Alloys	0.00
Other Metals	2.20
Other Inorganic Materials	4.08
Cellulosics	0.07
Rubber	1.71
Plastics	1.28
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	356.77
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	229.09
Packaging Material, Plastic	17.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.57E-02
Cs-137	1.70E-08
Np-237	1.06E-06
Pu-238	5.64E-03
Pu-239	1.39E-01
Pu-240	3.03E-02
Pu-241	2.77E-01
Pu-242	2.92E-06
Sr-90	2.79E-08
Th-229	2.14E-16
Th-230	4.61E-11
Th-232	2.22E-20
U-233	4.58E-12
U-234	5.13E-06
U-235	1.42E-07
U-236	8.99E-10
U-238	1.01E-05

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

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

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3150	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	ID-RF-S3150-A-S	91.1
SWB w/ 4 - 55-gal Drums w/ Liners	ID-RF-S3150-A-S	92.6
TDOP w/ 10 - 55-gal Drums w/ Liners	ID-RF-S3150-A-S	18.0
Emplaced Total		201.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.01
Aluminum-based Metals/Alloys	0.00
Other Metals	21.17
Other Inorganic Materials	4.29
Cellulosics	0.00
Rubber	1.93
Plastics	3.23
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	666.31
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	176.68
Packaging Material, Plastic	25.72
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.84E-01
Cs-137	8.76E-08
Np-237	8.61E-06
Pu-238	3.48E-02
Pu-239	7.55E-01
Pu-240	1.66E-01
Pu-241	1.60E+00
Pu-242	1.41E-05
Sr-90	1.49E-07
Th-229	6.98E-15
Th-230	5.02E-08
Th-232	4.86E-19
U-233	7.45E-11
U-234	2.79E-03
U-235	4.87E-07
U-236	9.84E-09
U-238	9.14E-07

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

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

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5100	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	ID-RF-S5100-A-S	162.7
SWB w/ 4 - 55-gal Drums w/ Liners	ID-RF-S5100-A-S	7.6
TDOP w/ 10 - 55-gal Drums w/ Liners	ID-RF-S5100-A-S	445.5
Emplaced Total		615.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.03
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	122.34
Cellulosics	15.01
Rubber	0.01
Plastics	8.66
Cements	0.00
Inorganic Matrix	0.99
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	204.86
Packaging Material, Plastic	22.35
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.30E-01
Cs-137	2.18E-08
Np-237	2.40E-06
Pu-238	3.15E-02
Pu-239	9.49E-01
Pu-240	2.00E-01
Pu-241	1.21E+00
Pu-242	1.71E-05
Sr-90	3.32E-08
Th-229	3.15E-10
Th-230	6.00E-11
Th-232	5.86E-19
U-233	1.68E-06
U-234	3.43E-06
U-235	8.94E-08
U-236	1.19E-08
U-238	7.31E-09

Haz. Waste No(s).

D008, D009, D022,
F001, F002, F005**No TRUCON
Codes Provided**

Waste Stream Description

N/A

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

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5126	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	ID-RF-S5126-S	79.9
55-gal Drum Dir Ld w/o Liner	ID-RF-S5126-S	0.4
SWB w/ 4 - 55-gal Drums w/ Liners	ID-RF-S5126-S	7.6
TDOP w/ 10 - 55-gal Drums w/ Liners	ID-RF-S5126-S	144.0
Emplaced Total		231.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.48
Aluminum-based Metals/Alloys	0.00
Other Metals	0.03
Other Inorganic Materials	239.38
Cellulosics	5.59
Rubber	0.05
Plastics	4.80
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	196.15
Packaging Material, Plastic	23.90
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.71E-01
Cs-137	4.21E-03
Np-237	1.14E-05
Pu-238	1.32E-01
Pu-239	3.63E+00
Pu-240	8.46E-01
Pu-241	6.39E+00
Pu-242	7.74E-05
Sr-90	8.50E-08
Th-229	8.82E-08
Th-230	6.48E-10
Th-232	6.19E-19
U-233	9.41E-04
U-234	7.23E-05
U-235	5.62E-08
U-236	2.51E-08
U-238	6.87E-06

Haz. Waste No(s).

D008, D029, F001,
F002, F005**No TRUCON
Codes Provided**

Waste Stream Description

N/A

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

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5300	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
SWB w/ 4 - 55-gal Drums w/ Liners	ID-RF-S5300-A-S	60.5
SWB w/ 4 - 55-gal Drums w/o Liners	ID-RF-S5300-A-S	1.9
TDOP w/ 10 - 55-gal Drums w/ Liners	ID-RF-S5300-A-S	2025.0
TDOP w/ 10 - 55-gal Drums w/o Liners	ID-RF-S5300-A-S	4.5
Emplaced Total		2091.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	4.41
Aluminum-based Metals/Alloys	0.23
Other Metals	0.43
Other Inorganic Materials	6.69
Cellulosics	54.41
Rubber	5.35
Plastics	51.74
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.01
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	231.18
Packaging Material, Plastic	17.02
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.86E-02
Am-243	8.19E-12
Cm-244	2.44E-04
Cs-137	8.88E-09
Np-237	1.81E-06
Pu-238	3.45E-03
Pu-239	1.04E-01
Pu-240	2.33E-02
Pu-241	1.59E-01
Pu-242	2.46E-05
Sr-90	1.24E-08
Th-229	1.33E-08
Th-230	9.69E-11
Th-232	1.71E-20
U-233	1.42E-04
U-234	1.08E-05
U-235	2.83E-07
U-236	6.91E-10
U-238	4.09E-07

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-ID-SDA-DEBRIS**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	ID-SDA-DEBRIS-S	33.5
Emplaced Total		33.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.32
Aluminum-based Metals/Alloys	2.80
Other Metals	0.00
Other Inorganic Materials	322.39
Cellulosics	30.63
Rubber	0.12
Plastics	12.59
Cements	0.00
Inorganic Matrix	0.35
Organic Matrix	0.00
Soils/gravel	4.16
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.07E-01
Cs-137	1.98E-07
Np-237	1.11E-05
Pu-238	1.54E-01
Pu-239	3.34E+00
Pu-240	7.65E-01
Pu-241	4.07E+00
Pu-242	6.85E-05
Sr-90	2.36E-07
Th-229	1.46E-08
Th-230	1.53E-09
Th-232	5.60E-19
U-233	1.55E-04
U-234	1.71E-04
U-235	4.51E-06
U-236	2.27E-08
U-238	6.17E-05

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

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

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	INW161.001-S	19.1
Emplaced Total		19.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.05
Aluminum-based Metals/Alloys	0.00
Other Metals	0.43
Other Inorganic Materials	247.58
Cellulosics	24.03
Rubber	0.00
Plastics	6.05
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.31E+00
Np-237	2.02E-06
Pu-238	2.76E-01
Pu-239	8.21E+00
Pu-240	1.86E+00
Pu-241	1.63E+01
Pu-242	1.84E-04
Th-229	3.27E-15
Th-230	8.06E-10
Th-232	3.40E-17
U-233	2.11E-11
U-234	1.99E-05
U-235	4.62E-06
U-236	2.75E-07
U-238	2.90E-07

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

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

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5330	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	INW169.001-S	19.1
Emplaced Total		19.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.24
Aluminum-based Metals/Alloys	0.05
Other Metals	3.52
Other Inorganic Materials	7.37
Cellulosics	130.27
Rubber	0.73
Plastics	7.38
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.43E-01
Np-237	3.79E-07
Pu-238	3.43E-02
Pu-239	1.03E+00
Pu-240	2.30E-01
Pu-241	2.27E+00
Pu-242	3.09E-05
Th-229	6.19E-16
Th-230	7.10E-10
Th-232	4.20E-18
U-233	3.99E-12
U-234	1.60E-05
U-235	3.78E-06
U-236	3.40E-08
U-238	2.29E-07

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-INW198.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5310	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	INW198.001-S	49.1
Emplaced Total		49.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.17
Aluminum-based Metals/Alloys	0.00
Other Metals	2.55
Other Inorganic Materials	13.60
Cellulosics	0.44
Rubber	0.53
Plastics	86.81
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.24E-01
Np-237	1.91E-07
Pu-238	2.42E-02
Pu-239	7.70E-01
Pu-240	1.72E-01
Pu-241	1.55E+00
Pu-242	1.81E-05
Th-229	2.48E-09
Th-230	1.38E-10
Th-232	3.15E-18
U-233	5.30E-06
U-234	3.23E-06
U-235	7.29E-07
U-236	2.55E-08
U-238	1.20E-06

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-INW211.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	INW211.001-S	299.9
55-gal Drum Dir Ld w/o Liner	INW211.001-S	0.2
SWB w/ 4 - 55-gal Drums w/ Liners	INW211.001-S	3.8
Emplaced Total		303.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.05
Aluminum-based Metals/Alloys	8.60
Other Metals	0.41
Other Inorganic Materials	22.38
Cellulosics	136.35
Rubber	0.08
Plastics	7.29
Cements	0.00
Inorganic Matrix	0.01
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	131.80
Packaging Material, Plastic	36.72
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.46E+00
Np-237	3.78E-06
Pu-238	4.34E-01
Pu-239	1.20E+01
Pu-240	2.67E+00
Pu-241	3.06E+01
Pu-242	4.62E-04
Th-229	2.00E-08
Th-230	6.97E-10
Th-232	4.89E-17
U-233	4.26E-05
U-234	1.86E-05
U-235	3.16E-06
U-236	3.96E-07
U-238	4.84E-06

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-INW216.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3121	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	INW216.001-S	1227.4
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	INW216.001-S	0.6
SWB Dir Ld w/o Liner	INW216.001-S	11.3
SWB w/ 4 - 55-gal Drums w/ Liners	INW216.001-S	5.7
Emplaced Total		1245.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.01
Aluminum-based Metals/Alloys	0.00
Other Metals	0.08
Other Inorganic Materials	12.65
Cellulosics	0.19
Rubber	0.01
Plastics	0.53
Cements	0.00
Inorganic Matrix	829.38
Organic Matrix	0.18
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	131.41
Packaging Material, Plastic	36.56
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.58E+01
Np-237	8.93E-05
Pu-238	8.94E-02
Pu-239	2.62E+00
Pu-240	5.88E-01
Pu-241	6.23E+00
Pu-242	9.49E-05
Th-229	1.51E-08
Th-230	2.70E-08
Th-232	1.55E-17
U-233	2.69E-05
U-234	5.00E-04
U-235	8.28E-05
U-236	1.05E-07
U-238	3.12E-03

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-INW218.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3121	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	INW218.001-S	833.0
SWB Dir Ld w/o Liner	INW218.001-S	275.9
SWB w/ 4 - 55-gal Drums w/ Liners	INW218.001-S	1.9
Emplaced Total		1110.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.01
Other Inorganic Materials	16.30
Cellulosics	0.16
Rubber	0.01
Plastics	1.25
Cements	0.00
Inorganic Matrix	753.19
Organic Matrix	0.19
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	136.58
Packaging Material, Plastic	27.77
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.45E-01
Np-237	1.45E-06
Pu-238	1.49E-02
Pu-239	4.48E-01
Pu-240	1.00E-01
Pu-241	1.05E+00
Pu-242	1.53E-05
Th-229	5.64E-09
Th-230	4.49E-08
Th-232	2.64E-18
U-233	1.00E-05
U-234	8.32E-04
U-235	9.20E-05
U-236	1.78E-08
U-238	7.87E-03

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-INW222.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3150	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	INW222.001-S	65.1
Emplaced Total		65.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.03
Other Inorganic Materials	0.76
Cellulosics	0.04
Rubber	0.00
Plastics	16.36
Cements	0.00
Inorganic Matrix	566.62
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.24E-01
Np-237	1.27E-06
Pu-238	1.52E-01
Pu-239	4.36E+00
Pu-240	9.80E-01
Pu-241	9.57E+00
Pu-242	1.14E-04
Th-229	2.07E-15
Th-230	6.41E-10
Th-232	1.79E-17
U-233	1.34E-11
U-234	1.54E-05
U-235	1.62E-06
U-236	1.45E-07
U-238	1.08E-04

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-INW243.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5122	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	INW243.001-S	73.8
55-gal Drum Dir Ld w/o Liner	INW243.001-S	1.0
Emplaced Total		74.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.37
Aluminum-based Metals/Alloys	0.01
Other Metals	11.00
Other Inorganic Materials	163.61
Cellulosics	0.58
Rubber	0.10
Plastics	23.80
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	36.49
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.98E-01
Np-237	1.87E-06
Pu-238	1.36E-01
Pu-239	3.16E+00
Pu-240	7.07E-01
Pu-241	7.32E+00
Pu-242	9.10E-05
Th-229	1.86E-08
Th-230	1.39E-09
Th-232	1.86E-17
U-233	3.30E-05
U-234	2.69E-05
U-235	5.99E-06
U-236	1.26E-07
U-238	4.24E-06

Haz. Waste No(s).

D005, D008, D009,
D022, F001, F002,
F005No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-INW247.001R1**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5122	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	INW247.001R1-S	112.7
55-gal Drum Dir Ld w/o Liner	INW247.001R1-S	4.2
Emplaced Total		116.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.15
Aluminum-based Metals/Alloys	0.00
Other Metals	0.01
Other Inorganic Materials	233.57
Cellulosics	19.55
Rubber	0.00
Plastics	1.28
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	35.68
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.45E-01
Np-237	1.37E-06
Pu-238	2.07E-01
Pu-239	3.55E+00
Pu-240	8.10E-01
Pu-241	8.56E+00
Pu-242	6.77E-05
Th-229	3.63E-08
Th-230	1.09E-10
Th-232	2.14E-17
U-233	6.45E-05
U-234	3.81E-06
U-235	7.23E-08
U-236	1.44E-07
U-238	6.13E-14

Haz. Waste No(s).

D008, F001, F002

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-INW252.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5311	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	INW252.001-S	60.9
Emplaced Total		60.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	207.33
Other Inorganic Materials	4.03
Cellulosics	0.10
Rubber	208.17
Plastics	3.38
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.90E-01
Np-237	1.33E-06
Pu-238	1.96E-01
Pu-239	4.95E+00
Pu-240	1.12E+00
Pu-241	1.65E+01
Pu-242	1.12E-04
Th-229	2.12E-15
Th-230	6.32E-10
Th-232	2.06E-17
U-233	1.38E-11
U-234	1.55E-05
U-235	3.71E-06
U-236	1.67E-07
U-238	8.43E-14

Haz. Waste No(s).

D008, D022, F001, F002, F003, F005, F006, F007, F009

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-INW276.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5126	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	INW276.001-S	10.2
Emplaced Total		10.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	329.28
Cellulosics	4.61
Rubber	0.00
Plastics	3.73
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.44E-01
Np-237	1.54E-06
Pu-238	2.24E-01
Pu-239	3.12E+00
Pu-240	7.11E-01
Pu-241	7.58E+00
Pu-242	6.42E-05
Th-229	9.58E-15
Th-230	3.02E-10
Th-232	5.21E-17
U-233	3.15E-11
U-234	6.62E-06
U-235	5.64E-08
U-236	2.11E-07
U-238	9.69E-14

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-INW276.002**

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TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5126	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	INW276.002-S	16.0
Emplaced Total		16.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	320.62
Cellulosics	8.74
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.45E-01
Np-237	1.42E-06
Pu-238	2.15E-01
Pu-239	2.98E+00
Pu-240	6.79E-01
Pu-241	7.58E+00
Pu-242	6.13E-05
Th-229	3.84E-08
Th-230	2.49E-10
Th-232	4.03E-17
U-233	4.56E-05
U-234	5.90E-06
U-235	7.39E-08
U-236	1.81E-07
U-238	8.32E-14

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-INW276.003**

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TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5126	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	INW276.003-S	182.6
55-gal Drum Dir Ld w/o Liner	INW276.003-S	4.0
Emplaced Total		186.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.04
Aluminum-based Metals/Alloys	0.00
Other Metals	0.04
Other Inorganic Materials	329.25
Cellulosics	8.62
Rubber	0.00
Plastics	1.35
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	36.22
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.73E+00
Np-237	3.57E-06
Pu-238	6.85E-01
Pu-239	9.25E+00
Pu-240	2.11E+00
Pu-241	2.63E+01
Pu-242	1.96E-04
Th-229	1.83E-07
Th-230	5.02E-10
Th-232	7.57E-17
U-233	2.79E-04
U-234	1.49E-05
U-235	2.74E-07
U-236	4.38E-07
U-238	6.00E-09

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-INW276.004**

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TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5126	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	INW276.004-S	42.4
55-gal Drum Dir Ld w/o Liner	INW276.004-S	4.4
Emplaced Total		46.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.25
Aluminum-based Metals/Alloys	0.00
Other Metals	0.17
Other Inorganic Materials	327.99
Cellulosics	2.14
Rubber	0.00
Plastics	3.07
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	33.55
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.68E+00
Np-237	3.51E-06
Pu-238	5.71E-01
Pu-239	7.84E+00
Pu-240	1.79E+00
Pu-241	2.20E+01
Pu-242	1.63E-04
Th-229	6.36E-07
Th-230	5.56E-10
Th-232	6.41E-17
U-233	9.69E-04
U-234	1.46E-05
U-235	6.59E-07
U-236	3.71E-07
U-238	1.73E-13

Haz. Waste No(s).

D008, D029, D040,
F001, F002, F005**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-INW296.001**

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TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Lead/Cadmium Metal Waste	Waste Matrix Code	S5112	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	INW296.001-S	93.2
55-gal Drum Dir Ld w/o Liner	INW296.001-S	4.6
Emplaced Total		97.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	5.43
Aluminum-based Metals/Alloys	0.39
Other Metals	220.74
Other Inorganic Materials	11.39
Cellulosics	0.93
Rubber	1.78
Plastics	4.31
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	35.27
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.58E+00
Np-237	2.95E-06
Pu-238	2.92E-01
Pu-239	5.25E+00
Pu-240	1.19E+00
Pu-241	1.28E+01
Pu-242	1.13E-04
Th-229	5.84E-08
Th-230	5.09E-10
Th-232	3.14E-17
U-233	1.04E-04
U-234	1.20E-05
U-235	1.58E-06
U-236	2.12E-07
U-238	4.05E-06

Haz. Waste No(s).

D006, D007, D008,
D009, D011, D028,
F001, F002, F003,
F005, F006, F007,
F009

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-LA-MHD01.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	LA-MHD01.001-S	233.8
55-gal Drum Dir Ld w/o Liner	LA-MHD01.001-S	309.5
SWB w/ 4 - 55-gal Drums w/ Liners	LA-MHD01.001-S	512.2
SWB w/ 4 - 55-gal Drums w/o Liners	LA-MHD01.001-S	51.0
Emplaced Total		1106.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	65.72
Aluminum-based Metals/Alloys	0.16
Other Metals	6.78
Other Inorganic Materials	33.60
Cellulosics	8.24
Rubber	7.31
Plastics	27.78
Cements	0.00
Inorganic Matrix	0.66
Organic Matrix	0.02
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	171.67
Packaging Material, Plastic	15.36
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.64E+00
Am-243	8.24E-04
Cm-244	3.99E-03
Cs-137	1.17E-06
Np-237	1.86E-04
Pu-238	1.65E+01
Pu-239	1.00E+01
Pu-240	2.66E+00
Pu-241	2.58E+01
Pu-242	1.84E-03
Sr-90	8.83E-04
Th-229	5.08E-08
Th-230	7.69E-06
Th-232	4.08E-09
U-233	5.42E-04
U-234	2.68E-03
U-235	3.60E-06
U-236	7.89E-08
U-238	5.39E-06

Haz. Waste No(s).

D004, D005, D006,
D007, D008, D009,
D010, D011, D018,
D019, D021, D022,
D035, D038, D039,
D040, F001, F002,
F005

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-LA-MHD02.001**

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TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	LA-MHD02.001-S	5.0
55-gal Drum Dir Ld w/o Liner	LA-MHD02.001-S	8.5
Emplaced Total		13.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	78.72
Aluminum-based Metals/Alloys	0.00
Other Metals	3.17
Other Inorganic Materials	17.11
Cellulosics	3.40
Rubber	25.27
Plastics	31.33
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	13.66
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.32E-01
Am-243	2.96E-06
Cs-137	1.76E-07
Np-237	6.16E-06
Pu-238	1.31E+02
Pu-239	1.03E-01
Pu-240	5.19E-02
Pu-241	4.80E-01
Pu-242	5.31E-05
Sr-90	1.76E-07
Th-229	1.77E-11
Th-230	2.22E-07
Th-232	3.80E-20
U-233	1.89E-07
U-234	2.49E-02
U-235	4.68E-08
U-236	1.54E-09
U-238	8.01E-15

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-LA-MHD03.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	LA-MHD03.001-S	5.4
55-gal Drum Dir Ld w/o Liner	LA-MHD03.001-S	182.8
SWB w/ 4 - 55-gal Drums w/ Liners	LA-MHD03.001-S	1.9
SWB w/ 4 - 55-gal Drums w/o Liners	LA-MHD03.001-S	1.9
Emplaced Total		192.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	13.41
Aluminum-based Metals/Alloys	0.05
Other Metals	1.65
Other Inorganic Materials	27.40
Cellulosics	20.43
Rubber	1.56
Plastics	56.45
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	132.38
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.18E-01
Am-243	1.22E-04
Cm-244	1.38E-03
Cs-137	2.29E-05
Np-237	6.96E-05
Pu-238	3.70E+00
Pu-239	6.55E-01
Pu-240	1.78E-01
Pu-241	2.45E+00
Pu-242	7.63E-05
Sr-90	2.27E-05
Th-229	6.95E-09
Th-230	4.50E-09
Th-232	1.30E-19
U-233	7.41E-05
U-234	5.05E-04
U-235	5.63E-07
U-236	5.28E-09
U-238	9.77E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D026, D027, D028, D029, D030, D035, D036, D037, D038, D039, D040, D043, F001, F002, F004, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-LA-MIN03-NC.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3120	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	LA-MIN03-NC.001-S	353.4
55-gal Drum Dir Ld w/o Liner	LA-MIN03-NC.001-S	0.4
SWB w/ 4 - 55-gal Drums w/ Liners	LA-MIN03-NC.001-S	13.2
Emplaced Total		367.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	2.67
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.46
Cellulosics	0.00
Rubber	0.00
Plastics	4.16
Cements	0.00
Inorganic Matrix	736.72
Organic Matrix	4.75
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	133.69
Packaging Material, Plastic	36.21
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.67E-01
Am-243	1.50E-06
Cs-137	1.17E-04
Np-237	5.96E-06
Pu-238	2.13E-02
Pu-239	3.80E-01
Pu-240	5.55E-02
Pu-241	9.34E-01
Pu-242	4.48E-05
Sr-90	9.68E-05
Th-229	4.95E-14
Th-230	3.09E-10
Th-232	4.07E-20
U-233	5.41E-10
U-234	3.44E-05
U-235	8.76E-07
U-236	1.65E-09
U-238	4.80E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D037, F001, F002, F004, F005, F006, F007, F009

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-LA-OS-00-01**

Appendix B

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5100	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/o Liner	LA-OS-00-01-S	0.4
Emplaced Total		0.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	130.77
Aluminum-based Metals/Alloys	0.00
Other Metals	0.96
Other Inorganic Materials	0.00
Cellulosics	137.50
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	527.40
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	137.50
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.32E+00
Cs-137	6.18E-04
Np-237	3.85E-05
Pu-238	4.16E+00
Pu-239	1.15E+01
Pu-240	1.17E+01
Pu-241	1.34E+01
Pu-242	2.32E-04
Sr-90	5.77E-04
Th-229	1.59E-13
Th-230	2.24E-01
Th-232	2.14E-16
U-233	7.13E-10
U-234	6.03E-05
U-235	5.67E-08
U-236	1.73E-06
U-238	1.75E-13

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-LA-OS-00-01.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5100	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	LA-OS-00-01.001-S	60.9
55-gal S100 POC - 6" w/ Liner	LA-OS-00-01.001-S	21.6
Emplaced Total		82.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	19.23
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	473.25
Packaging Material, Plastic	214.09
Packaging Material, Cellulosics	119.74
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.80E+00
Cs-137	1.84E-03
Np-237	2.85E-06
Pu-238	8.13E+01
Pu-239	8.43E+00
Pu-240	2.53E+00
Pu-241	8.19E+00
Pu-242	6.89E-04
Sr-90	2.24E-02
Th-229	3.45E-13
Th-230	6.32E-08
Th-232	1.85E-18
U-233	3.69E-09
U-234	7.15E-03
U-235	3.59E-07
U-236	7.50E-08
U-238	1.19E-08

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-LA-TA-55-19.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	LA-TA-55-19.01-S	0.2
55-gal Drum Dir Ld w/o Liner	LA-TA-55-19.01-S	5.6
SWB Dir Ld w/o Liner	LA-TA-55-19.01-S	75.6
Emplaced Total		81.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	51.12
Aluminum-based Metals/Alloys	0.03
Other Metals	0.10
Other Inorganic Materials	0.27
Cellulosics	6.20
Rubber	2.18
Plastics	26.49
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	151.88
Packaging Material, Plastic	0.09
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.12E-01
Am-243	5.37E-05
Cs-137	1.10E-08
Np-237	4.90E-05
Pu-238	2.48E-01
Pu-239	3.06E+00
Pu-240	7.56E-01
Pu-241	7.13E+00
Pu-242	2.05E-03
Th-229	4.71E-13
Th-230	4.32E-07
Th-232	2.71E-17
U-233	1.44E-09
U-234	1.45E-03
U-235	2.80E-06
U-236	1.57E-07
U-238	4.75E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-LA-TA-55-19.02**

Appendix B

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5300	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	LA-TA-55-19.02-S	16.0
55-gal Drum Dir Ld w/o Liner	LA-TA-55-19.02-S	171.4
SWB Dir Ld w/o Liner	LA-TA-55-19.02-S	13.2
SWB w/ 4 - 55-gal Drums w/ Liners	LA-TA-55-19.02-S	1.9
SWB w/ 4 - 55-gal Drums w/o Liners	LA-TA-55-19.02-S	26.5
Emplaced Total		229.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	10.64
Aluminum-based Metals/Alloys	0.02
Other Metals	0.66
Other Inorganic Materials	3.05
Cellulosics	39.08
Rubber	4.67
Plastics	62.20
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.03
Soils/gravel	0.18
Vitrified	0.00
Packaging Material, Steel	142.05
Packaging Material, Plastic	2.72
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.65E+00
Am-243	3.38E-04
Cs-137	2.36E-06
Np-237	9.50E-05
Pu-238	8.85E-01
Pu-239	3.57E+00
Pu-240	9.97E-01
Pu-241	1.32E+01
Pu-242	5.43E-03
Sr-90	2.19E-06
Th-229	9.30E-09
Th-230	7.49E-06
Th-232	8.99E-08
U-233	1.98E-05
U-234	3.52E-03
U-235	4.17E-06
U-236	1.48E-07
U-238	6.67E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-LA-TA-55-30**

Appendix B

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	LA-TA-55-30-S	10.6
55-gal Drum Dir Ld w/o Liner	LA-TA-55-30-S	79.0
SWB w/ 4 - 55-gal Drums w/o Liners	LA-TA-55-30-S	5.7
Emplaced Total		95.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	213.70
Aluminum-based Metals/Alloys	0.41
Other Metals	2.45
Other Inorganic Materials	18.28
Cellulosics	11.63
Rubber	1.41
Plastics	14.23
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.75
Vitrified	0.00
Packaging Material, Steel	135.58
Packaging Material, Plastic	4.12
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.22E+00
Am-243	6.83E-05
Cs-137	8.43E-05
Np-237	8.31E-05
Pu-238	4.70E-01
Pu-239	2.59E+00
Pu-240	7.30E-01
Pu-241	8.25E+00
Pu-242	6.28E-04
Sr-90	8.40E-05
Th-229	5.60E-08
Th-230	5.67E-09
Th-232	3.44E-07
U-233	9.96E-05
U-234	1.09E-04
U-235	2.28E-06
U-236	1.30E-07
U-238	5.85E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-LA-TA-55-43.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
SWB Dir Ld w/o Liner	LA-TA-55-43.01-S	190.9
Emplaced Total		190.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	45.68
Aluminum-based Metals/Alloys	0.11
Other Metals	0.38
Other Inorganic Materials	0.13
Cellulosics	1.22
Rubber	0.19
Plastics	8.86
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.74E-03
Am-243	7.54E-08
Np-237	2.04E-07
Pu-238	2.78E+00
Pu-239	2.44E-03
Pu-240	4.00E-03
Pu-241	2.73E-02
Pu-242	2.79E-06
Th-229	3.25E-15
Th-230	1.72E-08
Th-232	2.40E-08
U-233	7.76E-12
U-234	2.49E-04
U-235	2.17E-11
U-236	1.07E-09
U-238	3.79E-15

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-BLCHDN.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Lawrence Livermore National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5440	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	BLCHDN.001-S	0.2
55-gal Drum Dir Ld w/o Liner	BLCHDN.001-S	1.5
Emplaced Total		1.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	61.42
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	13.70
Cellulosics	5.41
Rubber	1.80
Plastics	40.99
Cements	0.00
Inorganic Matrix	11.12
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	4.63
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.57E-02
Am-243	1.34E-03
Cm-244	1.18E-01
Np-237	5.38E-04
Pu-238	5.24E-02
Pu-239	3.26E-07
Pu-240	3.96E-05
Pu-241	2.15E-05
Th-229	9.89E-13
Th-230	6.12E-12
Th-232	8.94E-23
U-233	7.03E-09
U-234	4.52E-07
U-235	4.86E-16
U-236	1.79E-12

Haz. Waste No(s).

F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-LL-M001-S5400**

Appendix B

TRU Waste Inventory Profile Report

Site	Lawrence Livermore National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	LL-M001-S5400-S	136.4
55-gal Drum Dir Ld w/o Liner	LL-M001-S5400-S	2.9
SWB w/ 4 - 55-gal Drums w/ Liners	LL-M001-S5400-S	3.8
Emplaced Total		143.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	88.62
Aluminum-based Metals/Alloys	2.36
Other Metals	3.76
Other Inorganic Materials	7.07
Cellulosics	5.01
Rubber	11.09
Plastics	57.87
Cements	0.00
Inorganic Matrix	14.54
Organic Matrix	3.08
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	132.92
Packaging Material, Plastic	35.70
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.05E+00
Am-243	9.47E-05
Cm-244	2.13E-01
Cs-137	1.44E-07
Np-237	5.11E-04
Pu-238	2.49E+00
Pu-239	4.18E+00
Pu-240	1.17E+00
Pu-241	1.44E+01
Pu-242	2.21E-04
Sr-90	1.41E-07
Th-229	9.37E-13
Th-230	3.82E-09
Th-232	7.74E-18
U-233	6.67E-09
U-234	1.52E-04
U-235	3.48E-06
U-236	1.04E-07
U-238	2.47E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D035, D040, F001, F002, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-NTLBL-S5400**

Appendix B

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	NTLBL-S5400-S	1.2
55-gal Drum Dir Ld w/o Liner	NTLBL-S5400-S	0.4
Emplaced Total		1.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	68.85
Aluminum-based Metals/Alloys	0.00
Other Metals	19.04
Other Inorganic Materials	35.81
Cellulosics	8.37
Rubber	4.61
Plastics	18.87
Cements	0.00
Inorganic Matrix	1.74
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	27.75
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.31E-01
Am-243	3.49E-03
Cm-244	5.39E-01
Cs-137	3.11E-05
Np-237	4.06E-04
Pu-238	8.79E-02
Pu-239	4.04E-01
Pu-240	9.16E-02
Pu-241	2.02E+00
Pu-242	1.27E-05
Sr-90	3.11E-05
Th-229	3.32E-13
Th-230	4.53E-12
Th-232	2.68E-19
U-233	3.54E-09
U-234	5.03E-07
U-235	7.97E-10
U-236	5.43E-09
U-238	3.84E-15

Haz. Waste No(s).

D004, D005, D006,
D007, D008, D009,
D010, D011, D022,
D028, F001, F002,
F003, F005

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-NTLRC-S5400**

Appendix B

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	NTLRC-S5400-S	3.1
Emplaced Total		3.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	48.02
Aluminum-based Metals/Alloys	10.80
Other Metals	9.85
Other Inorganic Materials	18.63
Cellulosics	26.85
Rubber	31.38
Plastics	73.04
Cements	0.00
Inorganic Matrix	9.45
Organic Matrix	0.57
Soils/gravel	0.17
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.54E+00
Am-243	1.13E-05
Cs-137	3.59E-07
Np-237	7.88E-05
Pu-238	1.84E-01
Pu-239	2.31E+00
Pu-240	8.47E-01
Pu-241	1.07E+01
Pu-242	9.39E-05
Sr-90	3.59E-07
Th-229	6.39E-14
Th-230	2.56E-08
Th-232	2.48E-18
U-233	6.83E-10
U-234	1.42E-03
U-235	4.74E-05
U-236	5.02E-08
U-238	3.37E-05

Haz. Waste No(s).

D005, D008, D009,
D011, D019, D035,
D040, F001, F005No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-NT-RF-BERYLLIUM**

Appendix B

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5111	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	NT-RF-BERYLLIUM-S	29.3
Emplaced Total		29.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	3.88
Aluminum-based Metals/Alloys	4.01
Other Metals	158.30
Other Inorganic Materials	1.17
Cellulosics	8.92
Rubber	0.09
Plastics	15.77
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.31E-01
Am-243	3.13E-08
Np-237	1.39E-06
Pu-238	3.24E-02
Pu-239	8.28E-01
Pu-240	1.88E-01
Pu-241	1.46E+00
Pu-242	1.47E-05
Th-229	3.80E-08
Th-230	5.55E-10
Th-232	5.51E-19
U-233	2.03E-04
U-234	3.09E-05
U-235	6.11E-07
U-236	1.12E-08
U-238	7.89E-06

Haz. Waste No(s).

D007, F002

No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-NT-RF-GRAPHITE**

Appendix B

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5126	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	NT-RF-GRAPHITE-S	3.7
Emplaced Total		3.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.32
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	291.08
Cellulosics	2.30
Rubber	0.61
Plastics	12.55
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.99E-01
Np-237	8.65E-06
Pu-238	3.20E-01
Pu-239	1.04E+01
Pu-240	1.92E+00
Pu-241	1.72E+01
Pu-242	1.40E-04
Th-229	6.76E-15
Th-230	2.89E-10
Th-232	5.64E-18
U-233	7.29E-11
U-234	1.70E-05
U-235	2.04E-08
U-236	1.14E-07
U-238	7.58E-06

Haz. Waste No(s).

D008

No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-NT-RF-METAL**

Appendix B

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5111	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	NT-RF-METAL-S	5.6
55-gal Drum Dir Ld w/o Liner	NT-RF-METAL-S	0.4
Emplaced Total		6.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	166.64
Aluminum-based Metals/Alloys	25.59
Other Metals	4.59
Other Inorganic Materials	0.24
Cellulosics	7.26
Rubber	0.65
Plastics	21.28
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	34.45
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.16E-01
Am-243	4.51E-07
Np-237	1.90E-06
Pu-238	3.54E-02
Pu-239	1.12E+00
Pu-240	2.77E-01
Pu-241	2.52E+00
Pu-242	2.24E-05
Th-229	1.51E-15
Th-230	1.33E-07
Th-232	8.11E-19
U-233	1.63E-11
U-234	7.39E-03
U-235	4.54E-06
U-236	1.64E-08
U-238	3.70E-03

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-NTS54332R0**

Appendix B

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	NTS54332R0-S	235.0
55-gal Drum Dir Ld w/o Liner	NTS54332R0-S	47.6
SWB w/ 4 - 55-gal Drums w/ Liners	NTS54332R0-S	24.6
Emplaced Total		307.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	45.13
Aluminum-based Metals/Alloys	2.90
Other Metals	3.84
Other Inorganic Materials	6.28
Cellulosics	13.22
Rubber	11.05
Plastics	46.10
Cements	0.00
Inorganic Matrix	10.47
Organic Matrix	3.40
Soils/gravel	0.08
Vitrified	0.00
Packaging Material, Steel	137.22
Packaging Material, Plastic	29.61
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.95E-01
Am-243	4.23E-05
Cm-244	9.57E-03
Cs-137	7.74E-07
Np-237	4.65E-05
Pu-238	8.15E-02
Pu-239	1.20E+00
Pu-240	3.14E-01
Pu-241	3.45E+00
Pu-242	3.38E-05
Sr-90	7.89E-07
Th-229	1.99E-07
Th-230	2.45E-09
Th-232	2.07E-18
U-233	7.08E-04
U-234	9.10E-05
U-235	3.25E-03
U-236	2.80E-08
U-238	3.29E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D040, F001, F002, F003, F004, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **WP-NTS54COMRO**

Appendix B

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	NTS54COMRO-S	39.5
55-gal Drum Dir Ld w/o Liner	NTS54COMRO-S	8.9
SWB w/ 4 - 55-gal Drums w/ Liners	NTS54COMRO-S	1.9
Emplaced Total		50.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	50.86
Aluminum-based Metals/Alloys	4.45
Other Metals	5.66
Other Inorganic Materials	8.36
Cellulosics	20.52
Rubber	12.84
Plastics	55.40
Cements	0.00
Inorganic Matrix	3.71
Organic Matrix	0.66
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	133.81
Packaging Material, Plastic	29.65
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.80E-01
Am-243	4.16E-04
Cm-244	4.91E-01
Cs-137	1.64E-06
Np-237	9.68E-05
Pu-238	4.25E-01
Pu-239	1.02E+00
Pu-240	2.42E-01
Pu-241	2.39E+00
Pu-242	3.66E-05
Sr-90	1.64E-06
Th-229	1.46E-06
Th-230	1.14E-09
Th-232	1.60E-18
U-233	5.19E-03
U-234	4.39E-05
U-235	2.63E-07
U-236	2.16E-08
U-238	1.75E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D040, F001, F002, F003, F004, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **WP-NTS54MIX1R0**

Appendix B

TRU Waste Inventory Profile Report

Site	Nevada Test Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	NTS54MIX1R0-S	0.4
Emplaced Total		0.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	33.89
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	2.40
Cellulosics	38.46
Rubber	41.59
Plastics	38.46
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.21E-03
Am-243	2.30E-04
Cs-137	1.77E-04
Np-237	1.90E-06
Pu-238	9.68E-04
Pu-239	6.96E-02
Pu-240	1.67E-02
Pu-241	5.43E-02
Pu-242	1.64E-06
Th-229	9.47E-15
Th-230	3.17E-13
Th-232	3.06E-19
U-233	4.05E-11
U-234	1.40E-08
U-235	3.43E-10
U-236	2.48E-09
U-238	1.24E-15

Haz. Waste No(s).

D004, D005, D006,
D007, D008, D009,
D010, D011, D019,
D022, D027, D028,
D029, D040, F001,
F002, F003, F004,
F005

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-RF001.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Combustible	Waste Matrix Code	S5390	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF001.01-S	745.1
55-gal Drum Dir Ld w/o Liner	RF001.01-S	92.4
SWB Dir Ld w/o Liner	RF001.01-S	100.2
SWB w/ 4 - 55-gal Drums w/ Liners	RF001.01-S	37.8
SWB w/ 4 - 55-gal Drums w/o Liners	RF001.01-S	3.8
Emplaced Total		979.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.08
Aluminum-based Metals/Alloys	0.01
Other Metals	0.24
Other Inorganic Materials	2.65
Cellulosics	27.92
Rubber	0.74
Plastics	78.05
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.02
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	136.53
Packaging Material, Plastic	28.78
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.53E+00
Am-243	1.21E-06
Np-237	5.61E-05
Pu-238	1.48E-01
Pu-239	3.44E+00
Pu-240	7.99E-01
Pu-241	1.12E+01
Pu-242	1.20E-04
Th-229	5.05E-08
Th-230	1.29E-08
Th-232	2.87E-17
U-233	7.70E-05
U-234	2.06E-04
U-235	9.79E-06
U-236	1.66E-07
U-238	2.26E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF002.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5111	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF002.01-S	399.4
55-gal Drum Dir Ld w/o Liner	RF002.01-S	32.2
55-gal POC - 12" w/ Liner	RF002.01-S	13.7
SWB Dir Ld w/o Liner	RF002.01-S	984.7
SWB w/ 4 - 55-gal Drums w/ Liners	RF002.01-S	17.0
TDOP w/ 1 SWB w/o Liners	RF002.01-S	13.5
Emplaced Total		1460.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	230.92
Aluminum-based Metals/Alloys	1.27
Other Metals	10.50
Other Inorganic Materials	0.49
Cellulosics	7.19
Rubber	0.20
Plastics	4.85
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.01
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	151.74
Packaging Material, Plastic	10.65
Packaging Material, Cellulosics	1.29
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.69E-01
Am-243	7.25E-07
Cs-137	2.13E-07
Np-237	8.25E-06
Pu-238	1.47E-01
Pu-239	3.02E+00
Pu-240	7.11E-01
Pu-241	1.22E+01
Pu-242	8.39E-05
Th-229	8.42E-09
Th-230	4.82E-09
Th-232	1.87E-17
U-233	1.50E-05
U-234	9.06E-05
U-235	4.81E-06
U-236	1.26E-07
U-238	1.94E-04

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF003.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5126	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF003.01-S	65.9
55-gal Drum Dir Ld w/o Liner	RF003.01-S	0.4
55-gal POC - 12" w/ Liner	RF003.01-S	275.8
SWB w/ 4 - 55-gal Drums w/ Liners	RF003.01-S	9.5
SWB w/ 4 - 55-gal Drums w/o Liners	RF003.01-S	3.8
Emplaced Total		355.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	13.10
Aluminum-based Metals/Alloys	0.00
Other Metals	0.07
Other Inorganic Materials	70.17
Cellulosics	1.84
Rubber	0.00
Plastics	2.72
Cements	0.00
Inorganic Matrix	0.30
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	441.58
Packaging Material, Plastic	36.01
Packaging Material, Cellulosics	106.71
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.37E+00
Np-237	2.60E-05
Pu-238	1.46E+00
Pu-239	3.57E+01
Pu-240	8.63E+00
Pu-241	9.73E+01
Pu-242	8.25E-04
Th-229	1.86E-08
Th-230	3.62E-09
Th-232	3.10E-16
U-233	2.84E-05
U-234	7.24E-05
U-235	1.64E-06
U-236	1.79E-06
U-238	3.67E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF004.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5122	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF004.01-S	263.3
55-gal Drum Dir Ld w/o Liner	RF004.01-S	7.9
55-gal POC - 12" w/ Liner	RF004.01-S	2.3
SWB Dir Ld w/o Liner	RF004.01-S	1.9
SWB w/ 4 - 55-gal Drums w/ Liners	RF004.01-S	5.7
SWB w/ 4 - 55-gal Drums w/o Liners	RF004.01-S	1.9
Emplaced Total		283.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.60
Aluminum-based Metals/Alloys	0.02
Other Metals	0.46
Other Inorganic Materials	464.77
Cellulosics	11.91
Rubber	0.00
Plastics	4.75
Cements	0.00
Inorganic Matrix	0.04
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	136.30
Packaging Material, Plastic	35.06
Packaging Material, Cellulosics	1.11
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.36E-01
Am-243	3.12E-09
Np-237	5.36E-06
Pu-238	1.15E-01
Pu-239	2.43E+00
Pu-240	5.62E-01
Pu-241	1.06E+01
Pu-242	6.77E-05
Th-229	2.30E-14
Th-230	3.29E-09
Th-232	1.03E-17
U-233	1.02E-10
U-234	7.40E-05
U-235	2.35E-06
U-236	8.34E-08
U-238	2.66E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF005.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Salt Waste	Waste Matrix Code	S3141	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	RF005.01-S	119.4
Emplaced Total		119.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	19.04
Aluminum-based Metals/Alloys	0.00
Other Metals	3.07
Other Inorganic Materials	19.27
Cellulosics	0.00
Rubber	0.00
Plastics	1.73
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	527.40
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	137.50
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.43E+01
Np-237	1.51E-04
Pu-238	1.71E+00
Pu-239	4.01E+01
Pu-240	1.03E+01
Pu-241	6.45E+01
Pu-242	8.47E-04
Th-229	1.06E-12
Th-230	1.86E-09
Th-232	6.11E-16
U-233	3.35E-09
U-234	4.54E-05
U-235	1.04E-06
U-236	2.75E-06
U-238	1.15E-12

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF005.02**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Salt Waste	Waste Matrix Code	S3141	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	RF005.02-S	78.4
Emplaced Total		78.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	13.92
Aluminum-based Metals/Alloys	0.00
Other Metals	0.23
Other Inorganic Materials	27.49
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	527.40
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	137.50
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.23E+01
Np-237	2.43E-04
Pu-238	1.54E+00
Pu-239	3.70E+01
Pu-240	9.73E+00
Pu-241	5.41E+01
Pu-242	8.23E-04
Th-229	1.30E-12
Th-230	1.86E-09
Th-232	4.56E-16
U-233	4.69E-09
U-234	4.38E-05
U-235	5.39E-07
U-236	2.31E-06
U-238	2.19E-09

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF006.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF006.01-S	2.7
55-gal POC - 12" w/ Liner	RF006.01-S	233.0
Emplaced Total		235.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	8.48
Aluminum-based Metals/Alloys	0.00
Other Metals	0.06
Other Inorganic Materials	32.83
Cellulosics	0.03
Rubber	0.00
Plastics	0.67
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	522.85
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	135.92
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.45E+00
Np-237	4.54E-05
Pu-238	1.93E+00
Pu-239	3.91E+01
Pu-240	9.45E+00
Pu-241	1.22E+02
Pu-242	1.26E-03
Th-229	1.16E-12
Th-230	8.80E-09
Th-232	1.56E-15
U-233	1.95E-09
U-234	1.08E-04
U-235	1.39E-06
U-236	4.21E-06
U-238	5.89E-09

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF008.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF008.01-S	4.4
55-gal Drum Dir Ld w/o Liner	RF008.01-S	0.2
55-gal POC - 12" w/ Liner	RF008.01-S	90.7
SWB w/ 4 - 55-gal Drums w/ Liners	RF008.01-S	1.9
Emplaced Total		97.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	5.36
Aluminum-based Metals/Alloys	0.10
Other Metals	1.39
Other Inorganic Materials	56.30
Cellulosics	0.36
Rubber	0.00
Plastics	1.05
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	502.57
Packaging Material, Plastic	36.52
Packaging Material, Cellulosics	128.35
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.92E+00
Np-237	1.60E-04
Pu-238	2.02E+00
Pu-239	3.49E+01
Pu-240	9.58E+00
Pu-241	1.05E+02
Pu-242	1.40E-03
Th-229	1.85E-12
Th-230	1.91E-09
Th-232	4.49E-16
U-233	5.08E-09
U-234	4.99E-05
U-235	5.58E-07
U-236	2.27E-06
U-238	7.76E-10

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF009.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Salt Waste	Waste Matrix Code	S3141	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF009.01-S	3.3
55-gal Drum Dir Ld w/o Liner	RF009.01-S	8.5
55-gal POC - 12" w/ Liner	RF009.01-S	1311.2
SWB w/ 4 - 55-gal Drums w/o Liners	RF009.01-S	3.8
Emplaced Total		1326.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	10.46
Aluminum-based Metals/Alloys	0.00
Other Metals	4.01
Other Inorganic Materials	17.82
Cellulosics	0.04
Rubber	0.00
Plastics	0.93
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	522.96
Packaging Material, Plastic	36.66
Packaging Material, Cellulosics	135.88
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.05E+01
Np-237	3.79E-04
Pu-238	1.47E+00
Pu-239	4.14E+01
Pu-240	1.03E+01
Pu-241	6.84E+01
Pu-242	1.03E-03
Th-229	2.98E-12
Th-230	1.40E-09
Th-232	3.69E-16
U-233	9.66E-09
U-234	3.71E-05
U-235	5.17E-07
U-236	2.14E-06
U-238	2.05E-09

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF010.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF010.01-S	274.6
55-gal Drum Dir Ld w/o Liner	RF010.01-S	12.9
SWB Dir Ld w/o Liner	RF010.01-S	264.6
SWB w/ 4 - 55-gal Drums w/ Liners	RF010.01-S	62.4
SWB w/ 4 - 55-gal Drums w/o Liners	RF010.01-S	15.1
Emplaced Total		629.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	12.18
Aluminum-based Metals/Alloys	8.77
Other Metals	0.98
Other Inorganic Materials	8.04
Cellulosics	36.45
Rubber	3.69
Plastics	9.49
Cements	0.00
Inorganic Matrix	0.29
Organic Matrix	0.03
Soils/gravel	0.13
Vitrified	0.00
Packaging Material, Steel	150.22
Packaging Material, Plastic	17.75
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.28E+00
Am-243	6.52E-08
Np-237	1.29E-05
Pu-238	3.97E-01
Pu-239	9.94E+00
Pu-240	2.32E+00
Pu-241	2.82E+01
Pu-242	2.53E-04
Th-229	7.26E-14
Th-230	1.08E-08
Th-232	6.12E-17
U-233	2.76E-10
U-234	2.04E-04
U-235	6.39E-06
U-236	4.13E-07
U-238	5.68E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF011.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5129	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF011.01-S	49.5
55-gal Drum Dir Ld w/o Liner	RF011.01-S	1.7
SWB w/ 4 - 55-gal Drums w/ Liners	RF011.01-S	28.4
Emplaced Total		79.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	10.77
Aluminum-based Metals/Alloys	0.01
Other Metals	0.04
Other Inorganic Materials	17.84
Cellulosics	1.61
Rubber	0.00
Plastics	1.75
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	159.43
Packaging Material, Plastic	28.85
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.82E+00
Np-237	7.79E-06
Pu-238	7.85E-01
Pu-239	1.87E+01
Pu-240	4.50E+00
Pu-241	4.73E+01
Pu-242	3.85E-04
Th-229	2.45E-14
Th-230	6.56E-10
Th-232	8.24E-17
U-233	1.20E-10
U-234	2.02E-05
U-235	3.79E-07
U-236	6.67E-07
U-238	5.29E-08

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF015.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF015.01-S	1.7
Emplaced Total		1.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	19.17
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	5.05
Cellulosics	12.98
Rubber	0.00
Plastics	1.62
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.12E+00
Np-237	5.10E-05
Pu-238	5.67E-01
Pu-239	1.13E+01
Pu-240	2.63E+00
Pu-241	5.57E+01
Pu-242	3.50E-04
Th-229	2.44E-13
Th-230	1.86E-10
Th-232	4.82E-17
U-233	1.05E-09
U-234	8.20E-06
U-235	5.56E-08
U-236	3.91E-07
U-238	2.64E-13

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF029.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF029.01-S	13.9
55-gal Drum Dir Ld w/o Liner	RF029.01-S	2.7
55-gal POC - 12" w/ Liner	RF029.01-S	3.1
SWB Dir Ld w/o Liner	RF029.01-S	4316.8
SWB w/ 4 - 55-gal Drums w/o Liners	RF029.01-S	5.7
TDOP w/ 1 SWB w/o Liners	RF029.01-S	4.5
Emplaced Total		4346.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	168.15
Aluminum-based Metals/Alloys	1.51
Other Metals	0.58
Other Inorganic Materials	13.97
Cellulosics	17.25
Rubber	1.33
Plastics	30.02
Cements	0.00
Inorganic Matrix	0.01
Organic Matrix	0.03
Soils/gravel	0.16
Vitrified	0.00
Packaging Material, Steel	153.84
Packaging Material, Plastic	0.15
Packaging Material, Cellulosics	0.10
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.85E-01
Am-243	3.33E-07
Cs-137	6.01E-09
Np-237	5.73E-06
Pu-238	8.45E-02
Pu-239	1.58E+00
Pu-240	3.80E-01
Pu-241	8.47E+00
Pu-242	5.09E-05
Pu-244	3.93E-21
Sr-90	4.10E-11
Th-229	1.70E-14
Th-230	6.91E-10
Th-232	4.45E-18
U-233	9.21E-11
U-234	1.97E-05
U-235	6.12E-07
U-236	4.50E-08
U-238	2.89E-07

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF031.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5313	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF031.01-S	15.2
55-gal Drum Dir Ld w/o Liner	RF031.01-S	5.0
55-gal POC - 12" w/ Liner	RF031.01-S	0.4
Emplaced Total		20.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.34
Aluminum-based Metals/Alloys	0.00
Other Metals	0.23
Other Inorganic Materials	1.10
Cellulosics	9.68
Rubber	0.00
Plastics	46.42
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	6.07
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	138.81
Packaging Material, Plastic	28.03
Packaging Material, Cellulosics	2.78
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.42E-01
Np-237	2.57E-06
Pu-238	1.13E-01
Pu-239	2.34E+00
Pu-240	5.42E-01
Pu-241	1.12E+01
Pu-242	6.42E-05
Th-229	4.23E-15
Th-230	1.18E-09
Th-232	3.57E-18
U-233	3.10E-11
U-234	4.44E-05
U-235	1.42E-06
U-236	4.82E-08
U-238	1.99E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF032.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5129	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF032.01-S	3.1
55-gal POC - 12" w/ Liner	RF032.01-S	206.1
Emplaced Total		209.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	15.54
Aluminum-based Metals/Alloys	0.00
Other Metals	0.23
Other Inorganic Materials	31.96
Cellulosics	0.04
Rubber	0.00
Plastics	0.06
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	521.49
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	135.45
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.10E+01
Np-237	1.21E-04
Pu-238	1.49E+00
Pu-239	4.12E+01
Pu-240	9.67E+00
Pu-241	8.65E+01
Pu-242	7.24E-04
Th-229	7.77E-13
Th-230	1.16E-09
Th-232	2.55E-16
U-233	2.85E-09
U-234	3.44E-05
U-235	5.16E-07
U-236	1.72E-06
U-238	2.41E-09

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF033.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF033.01-S	12.1
55-gal Drum Dir Ld w/o Liner	RF033.01-S	1.7
55-gal POC - 12" w/ Liner	RF033.01-S	11.9
Emplaced Total		25.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	16.37
Aluminum-based Metals/Alloys	0.00
Other Metals	1.27
Other Inorganic Materials	109.77
Cellulosics	0.20
Rubber	0.00
Plastics	27.33
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.09
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	314.59
Packaging Material, Plastic	34.59
Packaging Material, Cellulosics	63.72
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.50E+00
Np-237	3.14E-05
Pu-238	1.35E+00
Pu-239	3.12E+01
Pu-240	7.29E+00
Pu-241	1.09E+02
Pu-242	7.19E-04
Th-229	1.34E-13
Th-230	9.91E-10
Th-232	1.33E-16
U-233	5.97E-10
U-234	3.17E-05
U-235	5.69E-07
U-236	1.08E-06
U-238	2.34E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF036.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5420	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF036.01-S	44.1
Emplaced Total		44.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.12
Aluminum-based Metals/Alloys	0.79
Other Metals	0.00
Other Inorganic Materials	488.73
Cellulosics	7.07
Rubber	0.00
Plastics	12.67
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.29
Soils/gravel	4.40
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.01E+00
Am-243	1.85E-06
Np-237	8.26E-06
Pu-238	3.05E-01
Pu-239	6.00E+00
Pu-240	1.40E+00
Pu-241	3.25E+01
Pu-242	1.85E-04
Th-229	1.41E-14
Th-230	1.54E-09
Th-232	9.23E-18
U-233	1.02E-10
U-234	5.84E-05
U-235	2.52E-06
U-236	1.25E-07
U-238	6.76E-05

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF101.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Combustible	Waste Matrix Code	S5390	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF101.01-S	114.6
55-gal Drum Dir Ld w/o Liner	RF101.01-S	13.1
SWB Dir Ld w/o Liner	RF101.01-S	24.6
SWB w/ 4 - 55-gal Drums w/ Liners	RF101.01-S	22.7
Emplaced Total		175.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	2.53
Aluminum-based Metals/Alloys	0.02
Other Metals	0.39
Other Inorganic Materials	15.34
Cellulosics	62.57
Rubber	1.27
Plastics	30.20
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.84
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	144.40
Packaging Material, Plastic	26.35
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.98E+00
Am-243	6.04E-06
Np-237	1.34E-05
Pu-238	4.60E-01
Pu-239	9.65E+00
Pu-240	2.26E+00
Pu-241	3.88E+01
Pu-242	2.64E-04
Th-229	5.71E-14
Th-230	1.08E-08
Th-232	4.13E-17
U-233	2.54E-10
U-234	2.44E-04
U-235	7.76E-06
U-236	3.35E-07
U-238	4.88E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D043, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF101.29**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Combustible	Waste Matrix Code	S5390	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF101.29-S	25.4
55-gal Drum Dir Ld w/o Liner	RF101.29-S	3.1
SWB Dir Ld w/o Liner	RF101.29-S	1.9
Emplaced Total		30.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.43
Aluminum-based Metals/Alloys	0.03
Other Metals	0.00
Other Inorganic Materials	12.48
Cellulosics	51.65
Rubber	5.43
Plastics	47.43
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	132.21
Packaging Material, Plastic	30.90
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.03E+00
Np-237	6.44E-06
Pu-238	2.53E-01
Pu-239	5.15E+00
Pu-240	1.20E+00
Pu-241	1.93E+01
Pu-242	1.39E-04
Th-229	3.76E-14
Th-230	9.91E-09
Th-232	3.16E-17
U-233	1.41E-10
U-234	1.86E-04
U-235	5.93E-06
U-236	2.13E-07
U-238	6.71E-06

Haz. Waste No(s).

F001

No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF101.30**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Combustible	Waste Matrix Code	S5390	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF101.30-S	79.5
55-gal Drum Dir Ld w/o Liner	RF101.30-S	5.8
SWB Dir Ld w/o Liner	RF101.30-S	3.8
SWB w/ 4 - 55-gal Drums w/ Liners	RF101.30-S	24.6
SWB w/ 4 - 55-gal Drums w/o Liners	RF101.30-S	3.8
Emplaced Total		117.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.84
Aluminum-based Metals/Alloys	0.00
Other Metals	0.09
Other Inorganic Materials	2.31
Cellulosics	40.50
Rubber	0.80
Plastics	37.94
Cements	0.00
Inorganic Matrix	0.04
Organic Matrix	0.03
Soils/gravel	0.01
Vitrified	0.00
Packaging Material, Steel	150.92
Packaging Material, Plastic	28.45
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.10E+00
Am-243	2.67E-06
Np-237	2.28E-05
Pu-238	3.28E-01
Pu-239	7.49E+00
Pu-240	1.76E+00
Pu-241	2.52E+01
Pu-242	2.16E-04
Th-229	1.36E-13
Th-230	7.71E-09
Th-232	4.64E-17
U-233	5.10E-10
U-234	1.46E-04
U-235	4.55E-06
U-236	3.13E-07
U-238	1.57E-06

Haz. Waste No(s).

F001, F002

No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF101.31**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Combustible	Waste Matrix Code	S5390	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF101.31-S	43.9
55-gal Drum Dir Ld w/o Liner	RF101.31-S	5.4
SWB Dir Ld w/o Liner	RF101.31-S	9.5
SWB w/ 4 - 55-gal Drums w/ Liners	RF101.31-S	3.8
Emplaced Total		62.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	4.86
Aluminum-based Metals/Alloys	0.00
Other Metals	0.12
Other Inorganic Materials	2.09
Cellulosics	65.86
Rubber	0.69
Plastics	43.00
Cements	0.00
Inorganic Matrix	0.02
Organic Matrix	0.02
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	139.09
Packaging Material, Plastic	26.96
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.11E+00
Am-243	2.18E-07
Np-237	5.70E-06
Pu-238	1.68E-01
Pu-239	3.74E+00
Pu-240	8.88E-01
Pu-241	1.20E+01
Pu-242	1.32E-04
Th-229	4.04E-14
Th-230	5.78E-09
Th-232	3.19E-17
U-233	1.35E-10
U-234	9.34E-05
U-235	2.94E-06
U-236	1.84E-07
U-238	1.33E-06

Haz. Waste No(s).

F001, F002, F005

No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF101.35**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Combustible	Waste Matrix Code	S5390	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF101.35-S	51.2
55-gal Drum Dir Ld w/o Liner	RF101.35-S	17.1
SWB Dir Ld w/o Liner	RF101.35-S	3.8
SWB w/ 4 - 55-gal Drums w/ Liners	RF101.35-S	7.6
Emplaced Total		79.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.72
Aluminum-based Metals/Alloys	0.00
Other Metals	0.57
Other Inorganic Materials	2.66
Cellulosics	48.15
Rubber	0.47
Plastics	58.97
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	139.51
Packaging Material, Plastic	25.34
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.01E+00
Np-237	2.63E-05
Pu-238	3.72E-01
Pu-239	8.02E+00
Pu-240	1.87E+00
Pu-241	3.11E+01
Pu-242	2.62E-04
Th-229	1.63E-13
Th-230	5.75E-08
Th-232	4.94E-17
U-233	6.03E-10
U-234	1.07E-03
U-235	3.42E-05
U-236	3.33E-07
U-238	2.75E-06

Haz. Waste No(s).

F005

No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF102.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF102.01-S	45.3
55-gal Drum Dir Ld w/o Liner	RF102.01-S	0.6
SWB Dir Ld w/o Liner	RF102.01-S	175.8
SWB w/ 4 - 55-gal Drums w/ Liners	RF102.01-S	1.9
Emplaced Total		223.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	234.12
Aluminum-based Metals/Alloys	0.50
Other Metals	9.83
Other Inorganic Materials	1.88
Cellulosics	6.47
Rubber	0.25
Plastics	4.10
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	149.32
Packaging Material, Plastic	7.64
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.72E-01
Am-243	8.92E-07
Cs-137	4.40E-05
Np-237	6.69E-06
Pu-238	1.32E-01
Pu-239	2.56E+00
Pu-240	6.10E-01
Pu-241	1.26E+01
Pu-242	7.93E-05
Th-229	3.01E-14
Th-230	8.69E-10
Th-232	1.12E-17
U-233	1.32E-10
U-234	2.03E-05
U-235	6.21E-07
U-236	9.05E-08
U-238	1.78E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D028, D029, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF102.31**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Lead/Cadmium Metal Waste	Waste Matrix Code	S5112	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF102.31-S	22.3
55-gal Drum Dir Ld w/o Liner	RF102.31-S	1.0
55-gal POC - 12" w/ Liner	RF102.31-S	0.6
SWB Dir Ld w/o Liner	RF102.31-S	96.4
SWB w/ 4 - 55-gal Drums w/ Liners	RF102.31-S	3.8
Emplaced Total		124.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	189.33
Aluminum-based Metals/Alloys	0.36
Other Metals	147.87
Other Inorganic Materials	0.16
Cellulosics	5.66
Rubber	1.89
Plastics	3.08
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	152.87
Packaging Material, Plastic	7.32
Packaging Material, Cellulosics	0.69
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.14E+00
Am-243	1.55E-07
Np-237	8.83E-06
Pu-238	1.10E-01
Pu-239	2.21E+00
Pu-240	5.24E-01
Pu-241	1.01E+01
Pu-242	6.82E-05
Th-229	3.82E-14
Th-230	2.91E-09
Th-232	9.59E-18
U-233	1.69E-10
U-234	6.54E-05
U-235	2.23E-06
U-236	7.77E-08
U-238	1.72E-05

Haz. Waste No(s).

D008

No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF104.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5122	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF104.01-S	35.2
55-gal Drum Dir Ld w/o Liner	RF104.01-S	2.1
55-gal POC - 12" w/ Liner	RF104.01-S	7.7
SWB Dir Ld w/o Liner	RF104.01-S	5.7
SWB w/ 4 - 55-gal Drums w/ Liners	RF104.01-S	1.9
SWB w/ 4 - 55-gal Drums w/o Liners	RF104.01-S	1.9
Emplaced Total		54.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	5.65
Aluminum-based Metals/Alloys	0.01
Other Metals	1.43
Other Inorganic Materials	213.89
Cellulosics	7.04
Rubber	0.06
Plastics	5.63
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	194.88
Packaging Material, Plastic	29.72
Packaging Material, Cellulosics	19.46
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.23E+00
Am-243	4.20E-06
Np-237	1.87E-05
Pu-238	2.96E-01
Pu-239	7.52E+00
Pu-240	1.77E+00
Pu-241	2.36E+01
Pu-242	1.72E-04
Th-229	5.35E-14
Th-230	6.18E-10
Th-232	2.08E-17
U-233	2.93E-10
U-234	1.89E-05
U-235	5.52E-07
U-236	2.10E-07
U-238	2.58E-06

Haz. Waste No(s).

D005, D008, D009,
D022, F001, F002,
F005No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF107.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3190	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF107.01-S	63.4
Emplaced Total		63.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.17
Aluminum-based Metals/Alloys	0.00
Other Metals	0.73
Other Inorganic Materials	13.61
Cellulosics	0.00
Rubber	0.00
Plastics	1.11
Cements	0.00
Inorganic Matrix	776.54
Organic Matrix	11.45
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.13E+01
Np-237	2.62E-04
Pu-238	1.49E-01
Pu-239	3.01E+00
Pu-240	6.97E-01
Pu-241	1.60E+01
Pu-242	9.12E-05
Th-229	4.32E-13
Th-230	7.32E-09
Th-232	4.60E-18
U-233	3.16E-09
U-234	2.72E-04
U-235	1.75E-05
U-236	6.20E-08
U-238	9.43E-04

Haz. Waste No(s).

D006, D007, D008,
D009, D011**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-RF107.03**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3190	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF107.03-S	60.7
55-gal Drum Dir Ld w/o Liner	RF107.03-S	0.2
Emplaced Total		60.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.45
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	1.09
Cements	0.00
Inorganic Matrix	819.47
Organic Matrix	0.04
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	36.87
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.36E-01
Np-237	2.02E-06
Pu-238	1.90E-02
Pu-239	3.80E-01
Pu-240	8.83E-02
Pu-241	2.04E+00
Pu-242	1.16E-05
Th-229	3.44E-15
Th-230	3.42E-08
Th-232	5.82E-19
U-233	2.49E-11
U-234	1.27E-03
U-235	1.50E-04
U-236	7.86E-09
U-238	1.13E-02

Haz. Waste No(s).

F001, F002, F005, F006, F007, F009

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF107.04**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3190	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF107.04-S	100.9
55-gal Drum Dir Ld w/o Liner	RF107.04-S	1.9
SWB w/ 4 - 55-gal Drums w/ Liners	RF107.04-S	7.6
Emplaced Total		110.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.01
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.07
Rubber	0.00
Plastics	1.64
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	954.33
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	136.30
Packaging Material, Plastic	34.95
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.31E-01
Np-237	4.55E-06
Pu-238	3.74E-02
Pu-239	7.55E-01
Pu-240	1.75E-01
Pu-241	4.02E+00
Pu-242	2.29E-05
Th-229	7.74E-15
Th-230	5.20E-10
Th-232	1.15E-18
U-233	5.61E-11
U-234	1.94E-05
U-235	1.91E-06
U-236	1.56E-08
U-238	1.40E-04

Haz. Waste No(s).

D022, D028, D029,
D030, D032, D034,
F001, F002, F005No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF107.05**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3190	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF107.05-S	4.4
Emplaced Total		4.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.63
Cellulosics	8.65
Rubber	0.00
Plastics	2.35
Cements	0.00
Inorganic Matrix	601.28
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.07E+00
Np-237	6.15E-06
Pu-238	2.33E-01
Pu-239	4.67E+00
Pu-240	1.09E+00
Pu-241	2.50E+01
Pu-242	1.42E-04
Th-229	1.01E-14
Th-230	6.09E-08
Th-232	7.16E-18
U-233	7.39E-11
U-234	2.26E-03
U-235	7.28E-05
U-236	9.66E-08
U-238	6.43E-07

Haz. Waste No(s).

D004, D005, D009, D010, D022, D027, D028, D029, D032, D033, D034, D043, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF107.06**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3190	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF107.06-S	14.4
Emplaced Total		14.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.49
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	8.25
Cements	0.00
Inorganic Matrix	873.52
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.90E-02
Np-237	6.11E-08
Pu-238	1.05E-02
Pu-239	2.13E-01
Pu-240	4.94E-02
Pu-241	1.13E+00
Pu-242	6.46E-06
Th-229	8.03E-17
Th-230	4.34E-09
Th-232	3.25E-19
U-233	6.26E-13
U-234	1.61E-04
U-235	1.83E-05
U-236	4.39E-09
U-238	1.40E-03

Haz. Waste No(s).

F001, F002, F005,
F006, F007, F009,
P030, P098, P099,
P106, U003, U103,
U108

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-RF107.07**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3190	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF107.07-S	57.0
SWB w/ 4 - 55-gal Drums w/ Liners	RF107.07-S	1.9
Emplaced Total		58.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	3.51
Cements	0.00
Inorganic Matrix	1172.21
Organic Matrix	4.62
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	133.38
Packaging Material, Plastic	36.34
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.82E+00
Am-243	2.88E-05
Np-237	4.16E-05
Pu-238	6.24E-01
Pu-239	1.23E+01
Pu-240	2.87E+00
Pu-241	6.66E+01
Pu-242	3.79E-04
Th-229	7.10E-14
Th-230	6.26E-08
Th-232	1.89E-17
U-233	5.14E-10
U-234	2.32E-03
U-235	7.51E-05
U-236	2.55E-07
U-238	3.74E-05

Haz. Waste No(s).

F001, F002, F005,
F006, F007, F009,
P030, P098, P099,
P106, U003, U103,
U108

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-RF110.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF110.01-S	8.3
55-gal Drum Dir Ld w/o Liner	RF110.01-S	0.6
55-gal POC - 12" w/ Liner	RF110.01-S	0.2
Emplaced Total		9.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	4.57
Aluminum-based Metals/Alloys	5.49
Other Metals	0.08
Other Inorganic Materials	9.72
Cellulosics	50.40
Rubber	4.90
Plastics	26.12
Cements	0.00
Inorganic Matrix	0.07
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	139.81
Packaging Material, Plastic	34.48
Packaging Material, Cellulosics	3.13
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.13E+00
Am-243	1.88E-04
Np-237	2.65E-05
Pu-238	6.76E-01
Pu-239	1.37E+01
Pu-240	3.20E+00
Pu-241	5.50E+01
Pu-242	7.16E-04
Th-229	9.48E-14
Th-230	4.51E-09
Th-232	5.86E-17
U-233	4.44E-10
U-234	1.05E-04
U-235	3.33E-06
U-236	4.74E-07
U-238	2.12E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D029, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF110.05**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF110.05-S	16.6
55-gal Drum Dir Ld w/o Liner	RF110.05-S	1.7
SWB w/ 4 - 55-gal Drums w/ Liners	RF110.05-S	11.3
SWB w/ 4 - 55-gal Drums w/o Liners	RF110.05-S	1.9
Emplaced Total		31.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	7.11
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	7.40
Cellulosics	6.35
Rubber	0.07
Plastics	17.62
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.23
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	164.49
Packaging Material, Plastic	25.39
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.53E+00
Np-237	6.95E-06
Pu-238	6.46E-01
Pu-239	1.46E+01
Pu-240	3.38E+00
Pu-241	3.65E+01
Pu-242	3.25E-04
Th-229	2.78E-14
Th-230	8.76E-09
Th-232	8.92E-17
U-233	1.18E-10
U-234	1.68E-04
U-235	5.14E-06
U-236	6.02E-07
U-238	5.28E-07

Haz. Waste No(s).

D022, F001, F002

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF113.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Organics	Waste Matrix Code	S3114	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF113.01-S	0.4
Emplaced Total		0.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	108.89
Cellulosics	0.48
Rubber	0.00
Plastics	12.02
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.42E-01
Np-237	2.40E-06
Pu-238	4.36E-02
Pu-239	8.91E-01
Pu-240	2.07E-01
Pu-241	4.32E+00
Pu-242	2.71E-05
Th-229	1.13E-14
Th-230	1.43E-11
Th-232	3.79E-18
U-233	4.90E-11
U-234	6.32E-07
U-235	4.39E-09
U-236	3.07E-08
U-238	2.05E-14

Haz. Waste No(s).

D007, D010, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF115.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF115.01-S	17.3
55-gal Drum Dir Ld w/o Liner	RF115.01-S	1.5
55-gal POC - 12" w/ Liner	RF115.01-S	86.7
SWB w/ 4 - 55-gal Drums w/ Liners	RF115.01-S	5.7
SWB w/ 4 - 55-gal Drums w/o Liners	RF115.01-S	3.8
Emplaced Total		114.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	16.78
Aluminum-based Metals/Alloys	0.01
Other Metals	11.65
Other Inorganic Materials	53.37
Cellulosics	2.41
Rubber	0.01
Plastics	3.38
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.01
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	436.77
Packaging Material, Plastic	34.29
Packaging Material, Cellulosics	103.79
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.15E+00
Np-237	1.53E-05
Pu-238	9.04E-01
Pu-239	2.20E+01
Pu-240	5.13E+00
Pu-241	4.35E+01
Pu-242	4.30E-04
Th-229	5.47E-14
Th-230	6.12E-10
Th-232	9.39E-17
U-233	2.56E-10
U-234	2.01E-05
U-235	3.83E-07
U-236	7.61E-07
U-238	5.44E-06

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF116.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	RF116.01-S	4.0
Emplaced Total		4.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	19.23
Aluminum-based Metals/Alloys	0.00
Other Metals	16.09
Other Inorganic Materials	32.79
Cellulosics	0.00
Rubber	0.00
Plastics	3.23
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	527.40
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	137.50
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.45E+00
Np-237	3.61E-05
Pu-238	6.44E-01
Pu-239	2.48E+01
Pu-240	5.75E+00
Pu-241	3.16E+01
Pu-242	3.84E-04
Th-229	1.52E-13
Th-230	2.11E-10
Th-232	1.05E-16
U-233	6.78E-10
U-234	9.32E-06
U-235	1.22E-07
U-236	8.52E-07
U-238	2.89E-13

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF117.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF117.01-S	1.7
55-gal Drum Dir Ld w/o Liner	RF117.01-S	0.2
Emplaced Total		1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.50
Aluminum-based Metals/Alloys	0.00
Other Metals	1.28
Other Inorganic Materials	93.11
Cellulosics	8.65
Rubber	0.00
Plastics	8.22
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	32.89
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.60E+00
Np-237	2.19E-05
Pu-238	6.54E-01
Pu-239	1.31E+01
Pu-240	3.04E+00
Pu-241	6.49E+01
Pu-242	3.90E-04
Th-229	6.32E-14
Th-230	2.82E-08
Th-232	3.56E-17
U-233	3.46E-10
U-234	7.87E-04
U-235	2.51E-05
U-236	3.61E-07
U-238	2.22E-07

Haz. Waste No(s).

D007

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF118.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3111	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF118.01-S	1.0
55-gal POC - 12" w/ Liner	RF118.01-S	1431.0
55-gal POC - 12" w/o Liner	RF118.01-S	0.2
Emplaced Total		1432.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	11.29
Aluminum-based Metals/Alloys	0.00
Other Metals	1.26
Other Inorganic Materials	16.19
Cellulosics	0.00
Rubber	0.00
Plastics	1.32
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	527.11
Packaging Material, Plastic	36.99
Packaging Material, Cellulosics	137.40
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.19E+00
Am-243	8.75E-07
Np-237	5.70E-05
Pu-238	2.89E+00
Pu-239	4.66E+01
Pu-240	1.25E+01
Pu-241	1.37E+02
Pu-242	1.52E-03
Th-229	4.34E-13
Th-230	1.40E-08
Th-232	4.50E-16
U-233	1.42E-09
U-234	2.52E-04
U-235	6.53E-06
U-236	2.60E-06
U-238	1.40E-07

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF119.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3129	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF119.01-S	19.3
55-gal Drum Dir Ld w/o Liner	RF119.01-S	3.7
55-gal POC - 12" w/ Liner	RF119.01-S	1.0
Emplaced Total		24.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	57.80
Aluminum-based Metals/Alloys	0.02
Other Metals	0.85
Other Inorganic Materials	8.24
Cellulosics	0.30
Rubber	0.00
Plastics	15.73
Cements	0.00
Inorganic Matrix	245.52
Organic Matrix	1.90
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	147.89
Packaging Material, Plastic	31.26
Packaging Material, Cellulosics	5.93
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.47E+00
Np-237	1.16E-05
Pu-238	3.07E-01
Pu-239	6.09E+00
Pu-240	1.44E+00
Pu-241	3.14E+01
Pu-242	1.85E-04
Th-229	1.96E-14
Th-230	5.62E-10
Th-232	9.46E-18
U-233	1.42E-10
U-234	2.22E-05
U-235	7.28E-07
U-236	1.28E-07
U-238	8.83E-06

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF121.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5129	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	RF121.01-S	46.0
Emplaced Total		46.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	5.55
Aluminum-based Metals/Alloys	0.00
Other Metals	6.66
Other Inorganic Materials	11.10
Cellulosics	0.00
Rubber	0.00
Plastics	1.33
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	527.40
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	137.50
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.17E+00
Np-237	7.32E-06
Pu-238	1.39E+00
Pu-239	4.29E+01
Pu-240	1.03E+01
Pu-241	6.80E+01
Pu-242	6.64E-04
Th-229	9.54E-15
Th-230	7.86E-10
Th-232	1.20E-16
U-233	6.90E-11
U-234	2.98E-05
U-235	6.14E-07
U-236	1.22E-06
U-238	3.94E-09

Haz. Waste No(s).

D007, D008

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF122.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3129	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF122.01-S	0.2
55-gal Drum Dir Ld w/o Liner	RF122.01-S	1.5
55-gal POC - 12" w/ Liner	RF122.01-S	33.9
Emplaced Total		35.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	10.47
Aluminum-based Metals/Alloys	0.00
Other Metals	12.08
Other Inorganic Materials	21.10
Cellulosics	0.00
Rubber	0.00
Plastics	2.56
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	508.85
Packaging Material, Plastic	35.49
Packaging Material, Cellulosics	131.07
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.80E+00
Np-237	1.59E-03
Pu-238	1.76E+00
Pu-239	3.86E+01
Pu-240	9.29E+00
Pu-241	7.72E+01
Pu-242	9.78E-04
Th-229	7.92E-12
Th-230	5.75E-10
Th-232	1.70E-16
U-233	3.38E-08
U-234	2.54E-05
U-235	1.90E-07
U-236	1.38E-06
U-238	7.38E-13

Haz. Waste No(s).

D006, D007, D008,
D009, F001, F002,
F005No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF122.03**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3129	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF122.03-S	4.4
Emplaced Total		4.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	424.32
Cellulosics	0.00
Rubber	0.00
Plastics	6.64
Cements	0.00
Inorganic Matrix	163.06
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.62E+00
Np-237	9.31E-05
Pu-238	1.61E-01
Pu-239	3.25E+00
Pu-240	7.54E-01
Pu-241	1.73E+01
Pu-242	9.85E-05
Th-229	1.62E-13
Th-230	5.58E-08
Th-232	4.97E-18
U-233	1.17E-09
U-234	2.07E-03
U-235	1.39E-04
U-236	6.71E-08
U-238	7.77E-03

Haz. Waste No(s).

D004, D005, D009,
D010, F001, F002,
F005, F006, F007,
F009**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-RF122.04**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3129	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF122.04-S	54.1
Emplaced Total		54.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	662.72
Cellulosics	0.28
Rubber	0.00
Plastics	8.45
Cements	0.00
Inorganic Matrix	1.50
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.73E+00
Np-237	6.89E-05
Pu-238	1.48E-01
Pu-239	2.98E+00
Pu-240	6.92E-01
Pu-241	1.59E+01
Pu-242	9.06E-05
Th-229	1.20E-13
Th-230	1.65E-08
Th-232	4.56E-18
U-233	8.64E-10
U-234	6.13E-04
U-235	6.47E-05
U-236	6.15E-08
U-238	4.33E-03

Haz. Waste No(s).

D006, D007, D008,
D009, D011**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-RF122.05**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3129	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF122.05-S	16.2
Emplaced Total		16.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.15
Other Inorganic Materials	519.58
Cellulosics	0.00
Rubber	0.00
Plastics	49.09
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.81E-01
Np-237	8.32E-07
Pu-238	1.69E-02
Pu-239	3.37E-01
Pu-240	7.83E-02
Pu-241	1.81E+00
Pu-242	1.03E-05
Th-229	1.32E-15
Th-230	3.34E-08
Th-232	5.16E-19
U-233	9.75E-12
U-234	1.24E-03
U-235	6.46E-05
U-236	6.97E-09
U-238	2.40E-03

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-RF122.06**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3129	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF122.06-S	0.4
55-gal POC - 12" w/ Liner	RF122.06-S	6.9
Emplaced Total		7.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	9.30
Aluminum-based Metals/Alloys	0.00
Other Metals	12.03
Other Inorganic Materials	48.94
Cellulosics	0.00
Rubber	0.00
Plastics	2.65
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	504.74
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	129.64
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.80E+00
Np-237	5.64E-05
Pu-238	1.37E+00
Pu-239	3.47E+01
Pu-240	8.19E+00
Pu-241	6.81E+01
Pu-242	8.75E-04
Th-229	2.41E-13
Th-230	2.43E-09
Th-232	1.50E-16
U-233	1.07E-09
U-234	6.38E-05
U-235	1.95E-06
U-236	1.21E-06
U-238	3.86E-05

Haz. Waste No(s).

D006, D007, D008,
D009, D011**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-RF123.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	RF123.01-S	7.5
SWB w/ 4 - 55-gal Drums w/ Liners	RF123.01-S	1.9
Emplaced Total		9.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	5.09
Aluminum-based Metals/Alloys	0.00
Other Metals	5.89
Other Inorganic Materials	9.14
Cellulosics	0.00
Rubber	0.00
Plastics	1.18
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	463.65
Packaging Material, Plastic	32.83
Packaging Material, Cellulosics	109.79
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.74E+00
Np-237	1.76E-05
Pu-238	1.07E+00
Pu-239	3.23E+01
Pu-240	7.51E+00
Pu-241	6.59E+01
Pu-242	5.30E-04
Th-229	5.25E-14
Th-230	2.00E-09
Th-232	1.38E-16
U-233	2.61E-10
U-234	5.22E-05
U-235	1.57E-06
U-236	1.11E-06
U-238	1.06E-08

Haz. Waste No(s).

D006, D007, D008,
D009, D018, D019,
D022, D028, D029,
D043, F001, F002,
F005

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-RF123.02**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF123.02-S	0.6
55-gal Drum Dir Ld w/o Liner	RF123.02-S	0.2
Emplaced Total		0.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	29.16
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	128.43
Cellulosics	6.49
Rubber	0.00
Plastics	2.51
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	27.75
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.76E-02
Np-237	1.58E-08
Pu-238	5.04E-03
Pu-239	9.99E-02
Pu-240	2.33E-02
Pu-241	5.39E-01
Pu-242	3.07E-06
Th-229	9.30E-18
Th-230	7.58E-09
Th-232	1.53E-19
U-233	1.01E-13
U-234	2.81E-04
U-235	3.24E-05
U-236	2.07E-09
U-238	2.52E-03

Haz. Waste No(s).

D010, F001, F002, F005, F006, F007, F009

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF123.03**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF123.03-S	11.9
55-gal Drum Dir Ld w/o Liner	RF123.03-S	0.2
Emplaced Total		12.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	5.34
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	25.98
Cellulosics	11.41
Rubber	0.00
Plastics	2.72
Cements	0.00
Inorganic Matrix	0.96
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	36.36
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.48E+01
Np-237	2.16E-04
Pu-238	8.52E-01
Pu-239	1.71E+01
Pu-240	3.97E+00
Pu-241	8.74E+01
Pu-242	5.23E-04
Th-229	6.21E-13
Th-230	6.67E-10
Th-232	4.65E-17
U-233	3.40E-09
U-234	2.34E-05
U-235	1.64E-06
U-236	4.71E-07
U-238	1.22E-04

Haz. Waste No(s).

D006, D007, D008,
D009**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-RF123.04**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF123.04-S	44.5
Emplaced Total		44.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.39
Aluminum-based Metals/Alloys	0.00
Other Metals	0.01
Other Inorganic Materials	17.76
Cellulosics	1.10
Rubber	0.00
Plastics	0.27
Cements	0.00
Inorganic Matrix	0.76
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.11E+00
Np-237	2.24E-05
Pu-238	9.11E-01
Pu-239	1.81E+01
Pu-240	4.23E+00
Pu-241	9.34E+01
Pu-242	5.59E-04
Th-229	6.34E-14
Th-230	8.33E-10
Th-232	4.95E-17
U-233	3.48E-10
U-234	2.84E-05
U-235	7.02E-07
U-236	5.01E-07
U-238	5.86E-06

Haz. Waste No(s).

D007, D008, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF124.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5311	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF124.01-S	91.5
55-gal Drum Dir Ld w/o Liner	RF124.01-S	0.8
SWB Dir Ld w/o Liner	RF124.01-S	1.9
Emplaced Total		94.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.02
Aluminum-based Metals/Alloys	0.01
Other Metals	223.31
Other Inorganic Materials	0.82
Cellulosics	0.75
Rubber	129.33
Plastics	8.27
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	131.26
Packaging Material, Plastic	35.93
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.17E-01
Am-243	4.78E-08
Np-237	1.56E-05
Pu-238	1.19E-01
Pu-239	2.62E+00
Pu-240	6.04E-01
Pu-241	1.08E+01
Pu-242	6.99E-05
Th-229	1.08E-13
Th-230	4.06E-09
Th-232	1.59E-17
U-233	3.88E-10
U-234	7.63E-05
U-235	1.33E-06
U-236	1.07E-07
U-238	1.51E-06

Haz. Waste No(s).

D008

No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF124.02**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5311	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF124.02-S	13.1
55-gal Drum Dir Ld w/o Liner	RF124.02-S	0.2
Emplaced Total		13.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.26
Aluminum-based Metals/Alloys	0.00
Other Metals	207.17
Other Inorganic Materials	2.78
Cellulosics	0.98
Rubber	123.26
Plastics	8.93
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	36.42
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.41E-01
Np-237	1.09E-05
Pu-238	2.39E-01
Pu-239	5.01E+00
Pu-240	1.15E+00
Pu-241	2.13E+01
Pu-242	1.38E-04
Th-229	7.04E-14
Th-230	1.36E-09
Th-232	3.02E-17
U-233	2.57E-10
U-234	2.73E-05
U-235	7.74E-07
U-236	2.04E-07
U-238	6.59E-09

Haz. Waste No(s).

D008, D022, D028,
F001, F002**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-RF125.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Organics	Waste Matrix Code	S3900	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF125.01-S	3.3
55-gal Drum Dir Ld w/o Liner	RF125.01-S	1.0
55-gal POC - 12" w/ Liner	RF125.01-S	6.2
SWB w/ 4 - 55-gal Drums w/ Liners	RF125.01-S	3.8
Emplaced Total		14.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	10.07
Aluminum-based Metals/Alloys	0.00
Other Metals	2.84
Other Inorganic Materials	2.40
Cellulosics	0.76
Rubber	0.00
Plastics	1.35
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	11.23
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	323.90
Packaging Material, Plastic	28.89
Packaging Material, Cellulosics	59.63
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.54E+01
Np-237	3.18E-04
Pu-238	1.08E+00
Pu-239	2.69E+01
Pu-240	6.22E+00
Pu-241	7.44E+01
Pu-242	5.32E-04
Th-229	9.71E-13
Th-230	2.21E-08
Th-232	7.28E-17
U-233	5.23E-09
U-234	6.19E-04
U-235	2.00E-05
U-236	7.38E-07
U-238	4.37E-05

Haz. Waste No(s).

D004, D005, D009, D010, D022, D027, D028, D029, D032, D033, D034, D043, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF126.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Organics	Waste Matrix Code	S3229	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	RF126.01-S	1.0
Emplaced Total		1.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	8.65
Aluminum-based Metals/Alloys	0.00
Other Metals	11.54
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	2.31
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	13.94
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	527.40
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	137.50
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.29E+00
Np-237	5.21E-06
Pu-238	1.45E+00
Pu-239	3.73E+01
Pu-240	8.35E+00
Pu-241	8.15E+01
Pu-242	5.23E-04
Th-229	5.34E-15
Th-230	1.69E-09
Th-232	9.78E-17
U-233	4.32E-11
U-234	5.51E-05
U-235	1.39E-06
U-236	9.90E-07
U-238	1.10E-08

Haz. Waste No(s).

D007

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF126.04**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Organics	Waste Matrix Code	S3229	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	RF126.04-S	2.1
Emplaced Total		2.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	6.06
Aluminum-based Metals/Alloys	0.00
Other Metals	8.08
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	1.62
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	11.15
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	527.40
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	137.50
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.40E+00
Np-237	6.72E-06
Pu-238	1.20E+00
Pu-239	3.40E+01
Pu-240	7.85E+00
Pu-241	6.91E+01
Pu-242	6.09E-04
Th-229	6.97E-15
Th-230	2.49E-09
Th-232	9.20E-17
U-233	5.62E-11
U-234	7.61E-05
U-235	1.76E-06
U-236	9.31E-07
U-238	1.51E-08

Haz. Waste No(s).

D007, D008, F001, F002

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF128.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	RF128.01-S	198.2
Emplaced Total		198.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	4.71
Aluminum-based Metals/Alloys	0.00
Other Metals	5.88
Other Inorganic Materials	9.14
Cellulosics	0.00
Rubber	0.00
Plastics	1.18
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	527.40
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	137.50
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.89E+00
Np-237	1.99E-05
Pu-238	1.89E+00
Pu-239	4.29E+01
Pu-240	1.04E+01
Pu-241	8.98E+01
Pu-242	7.61E-04
Th-229	1.01E-13
Th-230	9.24E-10
Th-232	2.74E-16
U-233	3.96E-10
U-234	3.35E-05
U-235	2.70E-07
U-236	1.85E-06
U-238	1.47E-10

Haz. Waste No(s).

D005, D006, D007,
D008, D010, D011**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-RF129.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF129.01-S	8.3
55-gal Drum Dir Ld w/o Liner	RF129.01-S	0.6
55-gal POC - 12" w/ Liner	RF129.01-S	3.3
SWB Dir Ld w/o Liner	RF129.01-S	455.5
Emplaced Total		467.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	151.84
Aluminum-based Metals/Alloys	1.45
Other Metals	23.51
Other Inorganic Materials	20.31
Cellulosics	14.40
Rubber	2.70
Plastics	26.27
Cements	0.00
Inorganic Matrix	0.22
Organic Matrix	0.61
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	155.73
Packaging Material, Plastic	0.92
Packaging Material, Cellulosics	0.98
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.55E-01
Am-243	2.19E-07
Cs-137	2.23E-07
Np-237	4.70E-06
Pu-238	9.67E-02
Pu-239	1.86E+00
Pu-240	4.44E-01
Pu-241	9.54E+00
Pu-242	5.81E-05
Pu-244	1.52E-23
Th-229	1.35E-14
Th-230	3.01E-09
Th-232	5.21E-18
U-233	7.38E-11
U-234	8.42E-05
U-235	2.93E-06
U-236	5.27E-08
U-238	1.33E-06

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF129.05**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF129.05-S	2.1
55-gal Drum Dir Ld w/o Liner	RF129.05-S	0.2
SWB Dir Ld w/o Liner	RF129.05-S	446.0
Emplaced Total		448.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	182.14
Aluminum-based Metals/Alloys	0.66
Other Metals	61.87
Other Inorganic Materials	6.36
Cellulosics	8.09
Rubber	2.72
Plastics	22.28
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.26
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.38
Packaging Material, Plastic	0.17
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.57E-01
Am-243	7.64E-07
Np-237	2.26E-05
Pu-238	9.10E-02
Pu-239	1.68E+00
Pu-240	4.04E-01
Pu-241	9.22E+00
Pu-242	5.51E-05
Th-229	6.98E-14
Th-230	4.80E-10
Th-232	4.74E-18
U-233	3.75E-10
U-234	1.39E-05
U-235	4.20E-07
U-236	4.80E-08
U-238	1.41E-07

Haz. Waste No(s).

D008

No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF130.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF130.01-S	25.4
55-gal Drum Dir Ld w/o Liner	RF130.01-S	1.9
SWB w/ 4 - 55-gal Drums w/ Liners	RF130.01-S	11.3
Emplaced Total		38.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	13.34
Aluminum-based Metals/Alloys	1.41
Other Metals	6.65
Other Inorganic Materials	8.05
Cellulosics	0.81
Rubber	0.13
Plastics	7.57
Cements	0.00
Inorganic Matrix	2.91
Organic Matrix	7.06
Soils/gravel	0.03
Vitrified	0.00
Packaging Material, Steel	154.40
Packaging Material, Plastic	29.12
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.26E+00
Cm-244	3.48E-09
Cs-137	1.74E-05
Np-237	2.12E-04
Pu-238	6.45E-01
Pu-239	1.28E+01
Pu-240	2.99E+00
Pu-241	6.61E+01
Pu-242	3.95E-04
Pu-244	5.98E-18
Sr-90	8.46E-04
Th-229	6.56E-13
Th-230	1.38E-07
Th-232	1.18E-10
U-233	3.53E-09
U-234	1.05E-03
U-235	4.10E-05
U-236	3.55E-07
U-238	5.93E-05

Haz. Waste No(s).

D004, D005, D008, D009, D010, D022, D027, D028, D029, D032, D033, D034, D043, F001, F002, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF134.02**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Soils	Waste Matrix Code	S4200	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
SWB Dir Ld w/o Liner	RF134.02-S	11.3
Emplaced Total		11.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	3.35
Aluminum-based Metals/Alloys	2.23
Other Metals	0.00
Other Inorganic Materials	0.63
Cellulosics	10.66
Rubber	0.00
Plastics	10.56
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	666.10
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.87E-02
Np-237	2.25E-08
Pu-238	4.05E-03
Pu-239	8.16E-02
Pu-240	1.90E-02
Pu-241	4.16E-01
Pu-242	2.49E-06
Th-229	2.29E-17
Th-230	8.44E-13
Th-232	2.22E-19
U-233	1.86E-13
U-234	4.66E-08
U-235	3.22E-10
U-236	2.25E-09
U-238	1.50E-15

Haz. Waste No(s).

F001, F002, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF135.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Organics	Waste Matrix Code	S3290	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF135.01-S	2.3
Emplaced Total		2.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	5.51
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	802.10
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.19E+00
Np-237	2.26E-05
Pu-238	7.08E-02
Pu-239	1.45E+00
Pu-240	3.35E-01
Pu-241	7.32E+00
Pu-242	4.38E-05
Th-229	6.59E-14
Th-230	5.07E-09
Th-232	3.93E-18
U-233	3.59E-10
U-234	1.41E-04
U-235	1.63E-05
U-236	3.98E-08
U-238	1.26E-03

Haz. Waste No(s).

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

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-RF135.02**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Organics	Waste Matrix Code	S3290	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF135.02-S	10.4
Emplaced Total		10.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.82
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.61
Rubber	0.00
Plastics	0.42
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	446.57
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.32E-01
Np-237	1.27E-06
Pu-238	2.95E-02
Pu-239	5.94E-01
Pu-240	1.38E-01
Pu-241	3.16E+00
Pu-242	1.80E-05
Th-229	2.18E-15
Th-230	1.07E-08
Th-232	9.08E-19
U-233	1.58E-11
U-234	3.96E-04
U-235	1.28E-05
U-236	1.23E-08
U-238	1.13E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D026, D027, D028, D029, D030, D032, D034, D036, D043, F001, F002, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF137.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF137.01-S	0.4
Emplaced Total		0.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	29.18
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	240.94
Cellulosics	0.00
Rubber	1.49
Plastics	20.22
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.30E-01
Np-237	8.51E-06
Pu-238	7.92E-02
Pu-239	1.64E+00
Pu-240	3.79E-01
Pu-241	8.21E+00
Pu-242	4.92E-05
Th-229	2.54E-14
Th-230	1.65E-11
Th-232	4.44E-18
U-233	1.38E-10
U-234	9.13E-07
U-235	6.47E-09
U-236	4.49E-08
U-238	2.97E-14

Haz. Waste No(s).

D007, D008

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF139.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3121	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF139.01-S	11.6
Emplaced Total		11.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	44.57
Cellulosics	0.00
Rubber	0.00
Plastics	4.14
Cements	0.00
Inorganic Matrix	744.45
Organic Matrix	14.88
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.13E+01
Np-237	2.86E-04
Pu-238	1.41E-01
Pu-239	2.87E+00
Pu-240	6.66E-01
Pu-241	1.52E+01
Pu-242	8.68E-05
Th-229	4.89E-13
Th-230	5.67E-09
Th-232	4.39E-18
U-233	3.54E-09
U-234	2.11E-04
U-235	1.71E-05
U-236	5.92E-08
U-238	1.11E-03

Haz. Waste No(s).

D004, D005, D009, D010, F001, F002, F005, F006, F007, F009

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF140.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5420	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RF140.01-S	4.0
SWB Dir Ld w/o Liner	RF140.01-S	168.2
Emplaced Total		172.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	149.72
Aluminum-based Metals/Alloys	2.38
Other Metals	60.72
Other Inorganic Materials	47.21
Cellulosics	4.14
Rubber	1.58
Plastics	5.57
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.02
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	152.98
Packaging Material, Plastic	0.85
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.89E-01
Am-243	7.90E-08
Np-237	2.44E-06
Pu-238	7.81E-02
Pu-239	1.44E+00
Pu-240	3.49E-01
Pu-241	7.90E+00
Pu-242	4.72E-05
Th-229	7.02E-15
Th-230	4.19E-11
Th-232	4.09E-18
U-233	3.84E-11
U-234	1.61E-06
U-235	2.87E-08
U-236	4.14E-08
U-238	2.03E-10

Haz. Waste No(s).

D005, D008, D009,
D011, F001, F002,
F005, F006, F007,
F009

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-RF141.01**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	RF141.01-S	45.6
Emplaced Total		45.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	7.30
Aluminum-based Metals/Alloys	0.00
Other Metals	8.83
Other Inorganic Materials	14.35
Cellulosics	0.00
Rubber	0.00
Plastics	1.77
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.01
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	527.40
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	137.50
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.79E+00
Np-237	4.52E-06
Pu-238	1.57E+00
Pu-239	3.99E+01
Pu-240	9.35E+00
Pu-241	9.42E+01
Pu-242	6.16E-04
Th-229	4.57E-15
Th-230	2.11E-07
Th-232	1.10E-16
U-233	3.72E-11
U-234	5.86E-03
U-235	1.88E-04
U-236	1.11E-06
U-238	1.66E-06

Haz. Waste No(s).

D006, D007, D008

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RF141.02**

Appendix B

TRU Waste Inventory Profile Report

Site	Rocky Flats Environmental Technology Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3119	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	RF141.02-S	176.0
Emplaced Total		176.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	5.27
Aluminum-based Metals/Alloys	0.01
Other Metals	6.35
Other Inorganic Materials	11.00
Cellulosics	0.00
Rubber	0.00
Plastics	1.27
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	527.40
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	137.50
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.20E+00
Np-237	1.39E-03
Pu-238	1.58E+00
Pu-239	4.22E+01
Pu-240	1.01E+01
Pu-241	8.91E+01
Pu-242	8.65E-04
Th-229	4.40E-12
Th-230	6.00E-08
Th-232	1.18E-16
U-233	2.35E-08
U-234	1.68E-03
U-235	5.36E-05
U-236	1.20E-06
U-238	4.73E-07

Haz. Waste No(s).

D007, D008

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RLCBWD.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RLCBWD.001-S	2.9
55-gal Drum Dir Ld w/o Liner	RLCBWD.001-S	28.3
TDOP w/ 10 - 55-gal Drums w/o Liners	RLCBWD.001-S	40.5
Emplaced Total		71.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	45.44
Aluminum-based Metals/Alloys	0.19
Other Metals	2.30
Other Inorganic Materials	40.69
Cellulosics	18.88
Rubber	4.12
Plastics	21.99
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	187.85
Packaging Material, Plastic	1.50
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.35E+00
Cs-137	4.49E-06
Np-237	9.92E-06
Pu-238	3.33E-01
Pu-239	1.78E+00
Pu-240	8.51E-01
Pu-241	1.24E+01
Pu-242	1.48E-04
Sr-90	4.08E-06
Th-229	2.30E-08
Th-230	3.53E-10
Th-232	6.23E-19
U-233	2.45E-04
U-234	3.97E-05
U-235	1.12E-06
U-236	2.52E-08
U-238	2.08E-05

Haz. Waste No(s).

D005, D006, D007,
D008, D009, D011,
F001, F002, F003,
F005

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-RLCFFD.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RLCFFD.001-S	199.5
55-gal Drum Dir Ld w/o Liner	RLCFFD.001-S	11.2
TDOP w/ 10 - 55-gal Drums w/ Liners	RLCFFD.001-S	63.0
Emplaced Total		273.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	374.37
Aluminum-based Metals/Alloys	1.89
Other Metals	0.38
Other Inorganic Materials	37.57
Cellulosics	42.11
Rubber	8.95
Plastics	59.31
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.06
Vitrified	0.00
Packaging Material, Steel	154.05
Packaging Material, Plastic	30.90
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.81E+00
Cs-137	6.84E-08
Np-237	1.47E-06
Pu-238	3.57E-01
Pu-239	2.19E+00
Pu-240	1.11E+00
Pu-241	1.48E+01
Pu-242	1.70E-04
Sr-90	6.21E-08
Th-229	5.67E-16
Th-230	2.84E-10
Th-232	4.77E-09
U-233	7.73E-12
U-234	1.68E-05
U-235	4.93E-07
U-236	6.57E-08
U-238	1.09E-05

Haz. Waste No(s).

D007, D008, D009,
F001, F002, F003,
F005No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RLHMOX.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5120	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	RLHMOX.001-S	182.6
55-gal POC - 12" w/o Liner	RLHMOX.001-S	11.2
Emplaced Total		193.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	17.10
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	527.40
Packaging Material, Plastic	34.86
Packaging Material, Cellulosics	137.50
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.64E+01
Am-243	2.22E-06
Cs-137	3.20E-06
Np-237	2.13E-03
Pu-238	8.67E+00
Pu-239	4.00E+01
Pu-240	2.03E+01
Pu-241	3.07E+02
Pu-242	1.01E-02
Sr-90	2.87E-06
Th-229	6.66E-12
Th-230	1.41E-07
Th-232	2.38E-16
U-233	3.57E-08
U-234	3.98E-03
U-235	2.50E-04
U-236	2.40E-06
U-238	3.07E-03

Haz. Waste No(s).

D005, D006, D007,
D008, D011**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: WP-RLM233SD.001

Appendix B

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RLM233SD.001-S	0.6
55-gal Drum Dir Ld w/o Liner	RLM233SD.001-S	14.8
SWB Dir Ld w/o Liner	RLM233SD.001-S	1.9
Emplaced Total		17.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	391.83
Aluminum-based Metals/Alloys	1.62
Other Metals	0.08
Other Inorganic Materials	83.53
Cellulosics	10.94
Rubber	1.70
Plastics	28.44
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	2.03
Vitrified	0.00
Packaging Material, Steel	133.28
Packaging Material, Plastic	1.34
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.17E-01
Cs-137	1.48E-05
Np-237	2.36E-04
Pu-238	7.78E-02
Pu-239	6.83E-01
Pu-240	1.93E-01
Pu-241	1.69E+00
Pu-242	4.60E-05
Sr-90	1.35E-05
Th-229	4.83E-14
Th-230	1.49E-11
Th-232	1.41E-19
U-233	1.03E-09
U-234	1.77E-06
U-235	5.23E-08
U-236	5.71E-09
U-238	7.75E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F002, F003

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RLM308D.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/o Liner	RLM308D.001-S	10.8
55-gal POC - 12" w/ Liner	RLM308D.001-S	24.8
TDOP w/ 10 - 55-gal Drums w/o Liners	RLM308D.001-S	31.5
Emplaced Total		67.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	53.35
Aluminum-based Metals/Alloys	0.13
Other Metals	8.20
Other Inorganic Materials	8.21
Cellulosics	8.58
Rubber	2.80
Plastics	19.32
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	324.61
Packaging Material, Plastic	13.66
Packaging Material, Cellulosics	50.75
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.88E+01
Am-243	1.61E-05
Cs-137	2.48E-04
Np-237	3.04E-04
Pu-238	8.39E+00
Pu-239	1.44E+01
Pu-240	9.13E+00
Pu-241	1.69E+02
Pu-242	8.64E-03
Sr-90	2.25E-04
Th-229	4.16E-08
Th-230	2.08E-08
Th-232	2.33E-06
U-233	1.48E-04
U-234	8.05E-04
U-235	2.61E-05
U-236	8.12E-07
U-238	3.73E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, F001, F002, F003

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RLM325D.001**

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TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RLM325D.001-S	0.8
55-gal Drum Dir Ld w/o Liner	RLM325D.001-S	1.2
Emplaced Total		2.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	72.84
Aluminum-based Metals/Alloys	0.96
Other Metals	0.75
Other Inorganic Materials	9.13
Cellulosics	15.24
Rubber	8.22
Plastics	34.71
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	14.80
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.58E+00
Am-243	7.20E-05
Cs-137	3.10E-04
Np-237	1.64E-05
Pu-238	2.88E-01
Pu-239	1.54E+00
Pu-240	5.75E-01
Pu-241	1.13E+01
Pu-242	1.35E-04
Sr-90	2.86E-04
Th-229	1.28E-14
Th-230	9.99E-09
Th-232	1.68E-18
U-233	1.38E-10
U-234	5.56E-04
U-235	2.29E-05
U-236	3.41E-08
U-238	2.18E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D034, D037, D043, F001, F002, F003, F004, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RLMHASH.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3111	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	RLMHASH.001-S	62.0
55-gal POC - 12" w/o Liner	RLMHASH.001-S	0.2
Emplaced Total		62.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	16.75
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	527.40
Packaging Material, Plastic	36.88
Packaging Material, Cellulosics	137.50
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.21E+01
Cs-137	5.89E-08
Np-237	2.36E-05
Pu-238	1.24E+00
Pu-239	3.93E+01
Pu-240	9.73E+00
Pu-241	5.41E+01
Pu-242	1.31E-03
Sr-90	2.78E-08
Th-229	1.57E-08
Th-230	5.88E-10
Th-232	2.57E-16
U-233	2.78E-05
U-234	2.16E-05
U-235	2.43E-07
U-236	1.73E-06
U-238	1.19E-12

Haz. Waste No(s).

D005, D006, D007,
D008, D011**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-RLMPDT.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RLMPDT.001-S	13.5
55-gal Drum Dir Ld w/o Liner	RLMPDT.001-S	377.1
55-gal POC - 12" w/ Liner	RLMPDT.001-S	39.1
SWB Dir Ld w/o Liner	RLMPDT.001-S	497.1
TDOP w/ 10 - 55-gal Drums w/ Liners	RLMPDT.001-S	13.5
TDOP w/ 10 - 55-gal Drums w/o Liners	RLMPDT.001-S	738.0
Emplaced Total		1678.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	53.84
Aluminum-based Metals/Alloys	0.18
Other Metals	6.31
Other Inorganic Materials	7.62
Cellulosics	11.36
Rubber	9.13
Plastics	18.44
Cements	0.00
Inorganic Matrix	0.18
Organic Matrix	0.02
Soils/gravel	0.23
Vitrified	0.00
Packaging Material, Steel	191.99
Packaging Material, Plastic	1.30
Packaging Material, Cellulosics	3.20
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.05E+00
Am-243	1.11E-06
Cs-137	1.47E-05
Np-237	7.99E-05
Pu-238	5.97E-01
Pu-239	4.02E+00
Pu-240	1.31E+00
Pu-241	1.88E+01
Pu-242	2.55E-04
Sr-90	1.33E-05
Th-229	5.81E-08
Th-230	5.65E-10
Th-232	2.02E-09
U-233	2.07E-04
U-234	2.35E-05
U-235	6.15E-07
U-236	1.17E-07
U-238	4.50E-06

Haz. Waste No(s).

D004, D005, D006,
D007, D008, D009,
D010, D011, D019,
D030**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-RLMPURX.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RLMPURX.001-S	0.4
55-gal Drum Dir Ld w/o Liner	RLMPURX.001-S	41.0
TDOP w/ 10 - 55-gal Drums w/o Liners	RLMPURX.001-S	76.5
Emplaced Total		117.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	44.56
Aluminum-based Metals/Alloys	0.24
Other Metals	0.95
Other Inorganic Materials	7.88
Cellulosics	8.52
Rubber	22.86
Plastics	22.65
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.10
Vitrified	0.00
Packaging Material, Steel	196.34
Packaging Material, Plastic	0.13
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.73E+00
Am-243	9.80E-07
Cs-137	1.17E-04
Np-237	1.21E-05
Pu-238	1.64E+00
Pu-239	8.33E+00
Pu-240	3.29E+00
Pu-241	9.71E+01
Pu-242	8.39E-04
Sr-90	1.02E-04
Th-229	9.65E-08
Th-230	3.12E-10
Th-232	2.17E-17
U-233	3.43E-04
U-234	1.86E-05
U-235	1.70E-07
U-236	2.93E-07
U-238	2.22E-06

Haz. Waste No(s).

D005, D006, D008,
D009, D011**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-RLMSSC.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	RLMSSC.001-S	64.7
Emplaced Total		64.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	49.32
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	527.40
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	137.50
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.03E+01
Np-237	1.73E-05
Pu-238	3.27E+00
Pu-239	4.31E+01
Pu-240	9.58E+00
Pu-241	1.66E+02
Pu-242	1.12E-03
Th-229	3.38E-14
Th-230	1.21E-09
Th-232	1.75E-16
U-233	1.99E-10
U-234	5.04E-05
U-235	3.12E-07
U-236	1.42E-06
U-238	6.08E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RLMWARD.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RLMWARD.001-S	5.6
55-gal Drum Dir Ld w/o Liner	RLMWARD.001-S	15.0
Emplaced Total		20.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	33.84
Aluminum-based Metals/Alloys	0.00
Other Metals	0.96
Other Inorganic Materials	13.38
Cellulosics	37.65
Rubber	10.74
Plastics	39.21
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	10.09
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.13E+00
Cs-137	2.02E-07
Np-237	7.87E-06
Pu-238	3.92E-01
Pu-239	5.02E-01
Pu-240	3.46E-01
Pu-241	8.90E+00
Pu-242	2.68E-04
Sr-90	1.83E-07
Th-229	1.56E-15
Th-230	1.48E-09
Th-232	2.53E-19
U-233	3.35E-11
U-234	1.65E-04
U-235	5.50E-06
U-236	1.03E-08
U-238	4.93E-05

Haz. Waste No(s).

D007, D008, D009,
F001, F002, F003,
F005No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RLNPDT.002**

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TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	RLNPDT.002-S	62.4
55-gal Drum Dir Ld w/o Liner	RLNPDT.002-S	267.9
TDOP w/ 10 - 55-gal Drums w/ Liners	RLNPDT.002-S	4.5
TDOP w/ 10 - 55-gal Drums w/o Liners	RLNPDT.002-S	103.5
Emplaced Total		438.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	55.24
Aluminum-based Metals/Alloys	0.93
Other Metals	0.79
Other Inorganic Materials	25.15
Cellulosics	19.19
Rubber	8.43
Plastics	42.96
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.05
Vitrified	0.00
Packaging Material, Steel	155.69
Packaging Material, Plastic	5.44
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.39E+00
Am-243	7.95E-06
Cs-137	3.21E-06
Np-237	6.53E-06
Pu-238	4.54E-01
Pu-239	4.59E+00
Pu-240	1.10E+00
Pu-241	1.60E+01
Pu-242	1.91E-04
Sr-90	2.21E-06
Th-229	3.47E-14
Th-230	7.55E-10
Th-232	1.42E-10
U-233	1.34E-10
U-234	1.79E-05
U-235	3.87E-07
U-236	1.95E-07
U-238	9.91E-07

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **WP-RLNPURX.001**

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TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/o Liner	RLNPURX.001-S	34.3
TDOP w/ 10 - 55-gal Drums w/o Liners	RLNPURX.001-S	4.5
Emplaced Total		38.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	52.54
Aluminum-based Metals/Alloys	1.02
Other Metals	1.00
Other Inorganic Materials	18.32
Cellulosics	5.92
Rubber	8.89
Plastics	25.30
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	142.51
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.03E+00
Am-243	1.07E-06
Cs-137	4.97E-05
Np-237	7.04E-06
Pu-238	2.56E+00
Pu-239	1.06E+01
Pu-240	4.13E+00
Pu-241	1.63E+02
Pu-242	1.29E-03
Sr-90	3.18E-05
Th-229	1.07E-14
Th-230	8.37E-10
Th-232	7.56E-17
U-233	7.09E-11
U-234	3.70E-05
U-235	5.23E-08
U-236	6.12E-07
U-238	9.75E-13

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RLRFETS.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3111	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal POC - 12" w/ Liner	RLRFETS.001-S	63.9
Emplaced Total		63.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	17.91
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	527.40
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	137.50
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.66E+00
Cs-137	2.98E-07
Np-237	1.61E-05
Pu-238	1.26E+00
Pu-239	5.97E+01
Pu-240	9.92E+00
Pu-241	7.85E+01
Pu-242	1.02E-03
Sr-90	3.04E-08
Th-229	6.62E-08
Th-230	4.79E-09
Th-232	2.62E-16
U-233	1.18E-04
U-234	9.95E-05
U-235	3.10E-06
U-236	1.76E-06
U-238	9.26E-13

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-RLSWOCD.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/o Liner	RLSWOCD.001-S	5.8
Emplaced Total		5.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	46.18
Aluminum-based Metals/Alloys	2.28
Other Metals	1.14
Other Inorganic Materials	1.22
Cellulosics	14.88
Rubber	44.99
Plastics	45.34
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.69E-01
Cs-137	8.08E-05
Np-237	1.93E-06
Pu-238	1.81E-01
Pu-239	1.85E+00
Pu-240	5.66E-01
Pu-241	6.15E+00
Pu-242	5.73E-05
Sr-90	7.33E-05
Th-229	3.62E-16
Th-230	6.25E-11
Th-232	4.15E-19
U-233	7.89E-12
U-234	7.20E-06
U-235	2.48E-07
U-236	1.68E-08
U-238	2.60E-09

Haz. Waste No(s).

D004, D005, D006,
D007, D008, D009,
D010, D011, D019,
D022, D027, D028,
D029, D030, D034,
D037, D043, F001,
F002, F003, F004,
F005

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-RLVIPAC.001**

Appendix B

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5111	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
SWB Dir Ld w/o Liner	RLVIPAC.001-S	155.0
Emplaced Total		155.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	15.18
Aluminum-based Metals/Alloys	1.69
Other Metals	1.35
Other Inorganic Materials	5.42
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.32E+00
Am-243	1.10E-07
Cs-137	1.25E-05
Np-237	2.03E-05
Pu-238	1.00E+00
Pu-239	6.31E+00
Pu-240	1.93E+00
Pu-241	9.72E+00
Pu-242	5.69E-04
Sr-90	1.14E-05
Th-229	9.38E-09
Th-230	3.03E-08
Th-232	1.41E-18
U-233	1.00E-04
U-234	3.37E-03
U-235	8.81E-05
U-236	5.72E-08
U-238	1.69E-03

Haz. Waste No(s).

D005, D006, D007,
D008, D011No TRUCON
Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-SR2001.001.00**

Appendix B

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5300	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	SR2001.001.00-S	61.2
Emplaced Total		61.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	11.89
Aluminum-based Metals/Alloys	0.00
Other Metals	0.29
Other Inorganic Materials	8.37
Cellulosics	7.74
Rubber	1.00
Plastics	86.03
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.28E-02
Cs-137	8.19E-08
Np-237	2.04E-08
Pu-238	1.75E-02
Pu-239	1.58E-01
Pu-240	3.14E-02
Pu-241	4.44E-01
Pu-242	3.16E-06
Th-229	4.34E-17
Th-230	8.32E-12
Th-232	8.28E-19
U-233	2.42E-13
U-234	3.06E-07
U-235	9.34E-10
U-236	5.59E-09
U-238	2.86E-15

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-SR2002.002.00**

Appendix B

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5440	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	SR2002.002.00-S	69.9
Emplaced Total		69.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	8.65
Aluminum-based Metals/Alloys	0.40
Other Metals	0.32
Other Inorganic Materials	6.82
Cellulosics	6.82
Rubber	1.36
Plastics	81.40
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.90E-02
Cs-137	2.45E-07
Np-237	7.32E-08
Pu-238	6.67E-03
Pu-239	1.62E-01
Pu-240	3.75E-02
Pu-241	9.26E-01
Pu-242	5.11E-06
Sr-90	2.07E-08
Th-229	5.94E-07
Th-230	2.18E-12
Th-232	6.87E-19
U-233	1.27E-03
U-234	9.65E-08
U-235	8.01E-10
U-236	5.56E-09
U-238	3.86E-15

Haz. Waste No(s).

D008, F001, F002,
F003, F005**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-SR-W026-221F-HET**

Appendix B

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5300	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/o Liner	SR-W026-221F-HET-S	2.3
SWB w/ 4 - 55-gal Drums w/ Liners	SR-W026-221F-HET-S	28.4
SWB w/ 4 - 55-gal Drums w/o Liners	SR-W026-221F-HET-S	3.8
TDOP w/ 10 - 55-gal Drums w/ Liners	SR-W026-221F-HET-S	540.0
Emplaced Total		574.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	30.21
Aluminum-based Metals/Alloys	0.55
Other Metals	0.27
Other Inorganic Materials	6.69
Cellulosics	2.34
Rubber	8.09
Plastics	24.23
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.03
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	230.24
Packaging Material, Plastic	16.88
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.80E-01
Am-243	9.75E-08
Cm-244	1.33E-04
Cs-137	5.18E-07
Np-237	9.05E-06
Pu-238	5.55E-01
Pu-239	2.05E+00
Pu-240	5.73E-01
Pu-241	8.49E+00
Pu-242	6.80E-05
Sr-90	5.51E-07
Th-229	1.61E-14
Th-230	6.98E-09
Th-232	6.88E-08
U-233	1.15E-10
U-234	2.61E-04
U-235	3.03E-06
U-236	5.10E-08
U-238	2.25E-05

Haz. Waste No(s).

D006, D007, D008,
D009, D022, D028,
D029, F001, F002,
F003, F005

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **WP-SR-W026-772F-HET**

Appendix B

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5300	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	SR-W026-772F-HET-S	1.5
55-gal Drum Dir Ld w/o Liner	SR-W026-772F-HET-S	11.9
SWB w/ 4 - 55-gal Drums w/ Liners	SR-W026-772F-HET-S	34.0
TDOP w/ 10 - 55-gal Drums w/ Liners	SR-W026-772F-HET-S	1372.5
Emplaced Total		1419.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	4.12
Aluminum-based Metals/Alloys	0.32
Other Metals	0.34
Other Inorganic Materials	9.34
Cellulosics	2.27
Rubber	1.63
Plastics	21.65
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	230.36
Packaging Material, Plastic	16.96
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.29E-01
Am-243	5.62E-07
Cm-244	6.49E-05
Cs-137	4.32E-05
Np-237	9.44E-05
Pu-238	3.57E+00
Pu-239	2.32E-01
Pu-240	6.40E-02
Pu-241	1.14E+00
Pu-242	1.03E-05
Sr-90	3.82E-05
Th-229	1.84E-08
Th-230	1.64E-08
Th-232	3.20E-07
U-233	5.21E-05
U-234	6.24E-04
U-235	9.17E-07
U-236	5.69E-09
U-238	7.31E-07

Haz. Waste No(s).

D004, D005, D006,
D007, D008, D009,
D010, D011, D019,
D022, D028, D029,
F002, F003, F005

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Waste Stream ID: **WP-SR-W027-221F-HETA**

Appendix B

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5440	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	SR-W027-221F-HETA-	165.6
55-gal Drum Dir Ld w/o Liner	SR-W027-221F-HETA-	6.2
SWB w/ 4 - 55-gal Drums w/ Liners	SR-W027-221F-HETA-	217.4
SWB w/ 4 - 55-gal Drums w/o Liners	SR-W027-221F-HETA-	1.9
TDOP w/ 10 - 55-gal Drums w/ Liners	SR-W027-221F-HETA-	1719.0
Emplaced Total		2110.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	8.82
Aluminum-based Metals/Alloys	0.42
Other Metals	0.07
Other Inorganic Materials	4.62
Cellulosics	4.94
Rubber	3.55
Plastics	34.32
Cements	0.00
Inorganic Matrix	0.01
Organic Matrix	0.01
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	221.43
Packaging Material, Plastic	18.51
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.11E-01
Am-243	4.08E-08
Cs-137	1.06E-03
Np-237	4.47E-06
Pu-238	2.93E-01
Pu-239	9.61E-01
Pu-240	3.00E-01
Pu-241	5.56E+00
Pu-242	4.96E-05
Sr-90	1.32E-07
Th-229	2.69E-08
Th-230	4.32E-09
Th-232	5.08E-08
U-233	7.17E-05
U-234	1.22E-04
U-235	6.55E-08
U-236	3.56E-08
U-238	1.04E-06

Haz. Waste No(s).

D008, F001, F002,
F003, F005**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **WP-SR-W027-221H-HET**

Appendix B

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5440	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	SR-W027-221H-HET-S	5.0
55-gal Drum Dir Ld w/o Liner	SR-W027-221H-HET-S	16.2
SWB w/ 4 - 55-gal Drums w/ Liners	SR-W027-221H-HET-S	317.5
TDOP w/ 10 - 55-gal Drums w/ Liners	SR-W027-221H-HET-S	2529.0
TDOP w/ 10 - 55-gal Drums w/o Liners	SR-W027-221H-HET-S	18.0
Emplaced Total		2885.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	9.55
Aluminum-based Metals/Alloys	0.51
Other Metals	0.18
Other Inorganic Materials	4.01
Cellulosics	2.70
Rubber	7.33
Plastics	25.16
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	228.78
Packaging Material, Plastic	16.84
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.14E-02
Am-243	7.28E-06
Cm-244	2.87E-06
Cs-137	4.71E-06
Np-237	1.98E-04
Pu-238	2.13E+01
Pu-239	5.72E-02
Pu-240	1.91E-02
Pu-241	2.59E+00
Pu-242	1.12E-05
Sr-90	4.70E-06
Th-229	6.62E-08
Th-230	1.06E-07
Th-232	1.71E-06
U-233	2.36E-04
U-234	4.03E-03
U-235	9.85E-07
U-236	1.70E-09
U-238	1.23E-06

Haz. Waste No(s).

D006, D008, D009,
D019, D022, D029,
D039, D040, D043,
F001, F002, F003,
F005, U133

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **WP-SR-W027-235F-HET**

Appendix B

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	SR-W027-235F-HET-S	1.2
55-gal Drum Dir Ld w/o Liner	SR-W027-235F-HET-S	3.5
SWB w/ 4 - 55-gal Drums w/ Liners	SR-W027-235F-HET-S	20.8
TDOP w/ 10 - 55-gal Drums w/ Liners	SR-W027-235F-HET-S	369.0
Emplaced Total		394.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	17.32
Aluminum-based Metals/Alloys	0.36
Other Metals	0.44
Other Inorganic Materials	4.04
Cellulosics	3.89
Rubber	9.96
Plastics	27.11
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	229.48
Packaging Material, Plastic	16.97
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.31E-02
Am-243	1.33E-07
Cs-137	7.48E-07
Np-237	1.44E-03
Pu-238	2.14E+01
Pu-239	5.81E-02
Pu-240	3.14E-02
Pu-241	2.14E+00
Pu-242	1.72E-05
Sr-90	7.47E-07
Th-229	1.18E-12
Th-230	7.16E-08
Th-232	1.09E-06
U-233	1.26E-08
U-234	4.04E-03
U-235	3.00E-06
U-236	1.86E-09
U-238	6.41E-07

Haz. Waste No(s).

D004, D005, D006,
D007, D008, D009,
D010, D011, D018,
D019, D035, F002,
F003

**No TRUCON
Codes Provided**

Waste Stream Description

N/A

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **WP-SR-W027-773A-HET**

Appendix B

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	SR-W027-773A-HET-S	0.8
55-gal Drum Dir Ld w/o Liner	SR-W027-773A-HET-S	10.6
SWB w/ 4 - 55-gal Drums w/ Liners	SR-W027-773A-HET-S	3.8
TDOP w/ 10 - 55-gal Drums w/ Liners	SR-W027-773A-HET-S	477.0
TDOP w/ 10 - 55-gal Drums w/o Liners	SR-W027-773A-HET-S	13.5
Emplaced Total		505.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	15.61
Aluminum-based Metals/Alloys	0.22
Other Metals	0.54
Other Inorganic Materials	9.15
Cellulosics	4.34
Rubber	2.64
Plastics	16.85
Cements	0.00
Inorganic Matrix	0.04
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	229.36
Packaging Material, Plastic	16.31
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.92E-02
Am-243	7.90E-04
Cm-244	4.30E-02
Cs-137	1.07E-04
Np-237	1.24E-04
Pu-238	5.83E+00
Pu-239	2.08E-01
Pu-240	4.99E-02
Pu-241	1.07E+00
Pu-242	5.65E-06
Sr-90	1.07E-04
Th-229	1.15E-09
Th-230	1.90E-08
Th-232	4.01E-07
U-233	6.11E-06
U-234	1.08E-03
U-235	5.78E-07
U-236	2.96E-09
U-238	8.03E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D043, F002, F003, F004, F005

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **WP-SR-W027-FB-PRE86-C**

Appendix B

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5300	Handling	CH
Source Cat.	N/A	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2007	

Waste Volume Detail (m³)

Emplaced Volumes		
Container Type	Ref. Waste Stream	Volume
55-gal Drum Dir Ld w/ Liner	SR-W027-FB-PRE86-C-	177.0
55-gal Drum Dir Ld w/o Liner	SR-W027-FB-PRE86-C-	20.4
SWB w/ 4 - 55-gal Drums w/ Liners	SR-W027-FB-PRE86-C-	347.8
TDOP w/ 10 - 55-gal Drums w/ Liners	SR-W027-FB-PRE86-C-	2020.5
Emplaced Total		2565.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	11.74
Aluminum-based Metals/Alloys	0.12
Other Metals	0.12
Other Inorganic Materials	3.84
Cellulosics	4.44
Rubber	3.88
Plastics	31.17
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.01
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	221.22
Packaging Material, Plastic	18.23
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.16E-01
Am-243	6.11E-08
Cm-244	2.33E-04
Cs-137	2.43E-07
Np-237	2.21E-05
Pu-238	1.19E-01
Pu-239	1.16E+00
Pu-240	2.76E-01
Pu-241	4.17E+00
Pu-242	7.37E-05
Sr-90	2.30E-07
Th-229	9.15E-10
Th-230	1.23E-09
Th-232	3.84E-08
U-233	3.25E-06
U-234	4.61E-05
U-235	6.96E-08
U-236	2.46E-08
U-238	3.68E-07

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D018, D019, D022, D029, D039, D040, D043, F001, F002, F003, F005, U002, U151

No TRUCON Codes Provided

Waste Stream Description

N/A

APPENDIX C: Potential WIPP Waste

The following waste stream profiles contain information on waste streams that could not be shipped to WIPP at the time of this inventory update for various reasons, as stated in section 4.0 of this report. These reasons include: waste stream contents that are not allowed, radiological composition, lack of characterization information, or estimates of radiological activities that may exceed regulatory limits, to name a few. As reported in section 4.0 of this report, some of these waste streams may be treated or otherwise reworked to allow shipment to WIPP in the future.

The TRU waste sites that have reported potential TRU waste streams are:

Argonne National Laboratory – West (currently MFC)	AW
Babcock and Wilcox Nuclear Energy Services	BL
Bettis Atomic Power Laboratory	BT
Idaho National Laboratory	IN
Los Alamos National Laboratory	LA
Lawrence Berkeley Laboratory	LB
U.S. Army Material Command	MC
Nuclear Radiation Development Site, Inc.	ND
Oak Ridge National Laboratory	OR
Hanford (Richland Operations)	RL
Hanford (Office of River Protection)	RP
Separations Process Research Unit	SP
Savannah River Site	SR
General Electric Vallecitos Nuclear Center	VN
West Valley Demonstration Project	WV

Waste Stream ID: **AW-IN-TRA-BE-01**

Appendix C

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - West	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	TRA Beryllium Blocks	Activity Concentrations Decayed to CY			2001		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Beryllium Reflector Block	9.0	10.8	19.8
Shim Control Cylinder	6.2	5.4	11.5
Current Form Total	15.2	16.2	31.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid - Dir Ld	15.1	16.0	31.2
Final Form Total	15.1	16.0	31.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	429.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	560.60
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.90E-02
Cs-137	6.12E+00
Pu-238	2.96E-02
Pu-239	5.91E-03
Pu-240	1.54E-02
Pu-241	1.97E+00
Pu-242	3.24E-04
Sr-90	1.80E+00
U-233	2.15E-05
U-234	5.51E-06
U-238	1.88E-06

No Hazardous Waste Numbers Provided

TRUCON Code(s)

317

Waste Stream Description

This waste stream consists of beryllium reflector blocks and outer shim control cylinders (OSCCs) removed from the Advanced Test Reactor (ATR) at INL.

Waste Stream ID: **AW-W018**

Appendix C

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - West	Final Waste Form	Uncategorized Metal	Waste Matrix Code	X7520	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	SODIUM - TRU			Activity Concentrations Decayed to CY	1996		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Liner - RSWF	0.6	0.0	4.0
Current Form Total	4.0	0.0	4.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid - Dir Ld	4.5	0.0	4.5
Final Form Total	4.5	0.0	4.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	2035.00
Aluminum-based Metals/Alloys	0.00
Other Metals	254.40
Other Inorganic Materials	127.20
Cellulosics	127.20
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	560.60
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.30E+02
Cs-137	6.03E+04
Pu-238	3.25E+02
Pu-239	5.76E+03
Pu-240	9.68E+02
Pu-241	2.40E+04
Sr-90	2.47E+04

Haz. Waste No(s).

D001, D003

TRUCON Code(s)

317

Waste Stream Description

Sodium was used as a primary and secondary coolant for the EBR-II reactor. Waste sodium metal is a hazardous constituent of some of the TRU waste stored at the ANL-W Radioactive Scrap and Waste Facility (RSWF). The waste was generated during maintenance and operational activities. The sodium typically coats waste metal equipment, experiments, and components removed during reactor operations and maintenance activities or is contained in blanket elements. This waste will require treatment prior to disposal at WIPP. Final waste form has not been determined yet, but the sodium will be removed from the waste. Once removed, the resulting waste may not be considered TRU, especially in the case of sodium-bonded blanket fuels.

Waste Stream ID: **AW-W019**

Appendix C

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - West	Final Waste Form	Uncategorized Metal	Waste Matrix Code	X7520	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	SODIUM POTASSIUM -NaK- TRU			Activity Concentrations Decayed to CY	1996		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Liner - RSWF	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	2077.60
Aluminum-based Metals/Alloys	0.00
Other Metals	259.70
Other Inorganic Materials	130.00
Cellulosics	130.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	560.60
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.07E+01
Cs-137	1.88E+04
Pu-238	1.01E+02
Pu-239	1.80E+03
Pu-240	3.02E+02
Pu-241	7.49E+03
Sr-90	7.69E+03

Haz. Waste No(s).

D003

TRUCON Code(s)

317

Waste Stream Description

Sodium potassium alloy (NaK) was used as a coolant for some components of the EBR-II Reactor. Waste NaK metal is a hazardous constituent of some transuranic wastes stored at the ANL-W Radioactive Scrap and Waste Facility (RSWF). The remote-handled NaK waste at RSWF is contained in stainless steel capsules or tubing and placed inside carbon steel waste cans which then are placed in stainless steel outer cans. The entire package is then stored in RSWF storage liners (carbon steel soil storage vaults). The NaK was generated during maintenance and operational activities. NaK waste is in canisters with TRU waste metal pieces and rods from reactor experiments. This waste will require treatment prior to disposal at WIPP. Final waste form has not been determined yet.

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

Appendix C

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - West	Final Waste Form	Heterogeneous	Waste Matrix Code	S5440	Handling	RH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	TRU-CD-HOT CELL WASTE			Activity Concentrations Decayed to CY	1993		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
45-gal Drum	0.3	13.3	13.6
Liner - RSWF	0.5	0.0	0.5
Current Form Total	0.8	13.3	14.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid - Dir Ld	1.8	23.1	24.9
Final Form Total	1.8	23.1	24.9

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Cs-137	1.20E+04
Np-237	5.17E-02
Pu-238	2.21E+03
Pu-239	6.39E+02
Pu-240	2.85E+02
Pu-241	3.70E+01
Sr-90	6.02E+04
U-233	8.43E-03
U-234	2.23E+00
U-235	4.02E-02
U-236	4.15E-02
U-238	9.64E-02

Haz. Waste No(s).

D006, D007, D008

TRUCON Code(s)

325

Waste Stream Description

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

Waste Stream ID: **AW-W029**

Appendix C

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - West	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5111	Handling	RH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	RSWF TRANSURANIC WASTE			Activity Concentrations Decayed to CY	1996		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Liner - RSWF	1.5	0.0	12.1
Current Form Total	12.1	0.0	12.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid - Dir Ld	12.5	0.0	12.5
Final Form Total	12.5	0.0	12.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	126.90
Aluminum-based Metals/Alloys	2.40
Other Metals	266.50
Other Inorganic Materials	14.60
Cellulosics	8.30
Rubber	0.50
Plastics	5.40
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	560.60
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.74E+02
Cs-137	8.04E+04
Pu-238	4.33E+02
Pu-239	7.69E+03
Pu-240	1.29E+03
Pu-241	3.20E+04
Sr-90	3.29E+04

No Hazardous Waste Numbers Provided

TRUCON Code(s)

317

Waste Stream Description

Radioactive Scrap and Waste Facility (RSWF) Waste containers storing TRU waste from various facilities. Waste includes analytical samples, EBR-I waste and subassembly hardware.

Waste Stream ID: **AW-W048**

Appendix C

TRU Waste Inventory Profile Report

Site	Argonne National Laboratory - West	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	FCF Indirect RH-MTRU Waste			Activity Concentrations Decayed to CY	2006		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Canister - (MFC) o/p 45-gal Drums	2.0	5.4	7.5
Liner - RSWF	0.2	0.0	0.2
Current Form Total	2.2	5.4	7.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid - Dir Ld	3.6	7.1	10.7
Final Form Total	3.6	7.1	10.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	526.00
Aluminum-based Metals/Alloys	42.30
Other Metals	472.70
Other Inorganic Materials	44.00
Cellulosics	49.30
Rubber	13.70
Plastics	51.80
Cements	0.00
Inorganic Matrix	73.90
Organic Matrix	0.60
Soils/gravel	2.30
Vitrified	0.00
Packaging Material, Steel	560.60
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Cs-137	8.73E+02
Pu-239	4.03E-01
Sr-90	9.49E+02
U-235	1.24E-04

Haz. Waste No(s).

D006

TRUCON Code(s)

325

Waste Stream Description

FCF Argon cell RH-MTRU waste - rags, plastic, glass, rubber, paper, cardboard, aluminum foil, metal, brushes, copper, bolts, smears, nylon sling, insulation, o-rings, etc.

Waste Stream ID: **BL-Parks**

Appendix C

TRU Waste Inventory Profile Report

Site	Babcock and Wilcox Nuclear Energy Services	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Source Information Not Compiled	Defense Determination	Pending Determination	Inventory Date	12/31/2007		
Stream Name	Parks Township TRU Orphan Waste			Activity Concentrations Decayed to CY	2000		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	4.2	0.0	4.2
Box - Steel	11.3	0.0	11.3
Current Form Total	15.5	0.0	15.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	4.2	0.0	4.2
SWB Dir Ld w/o Liner	11.3	0.0	11.3
Final Form Total	15.5	0.0	15.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	147.41
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.99E+00
Cs-137	4.11E-03
Pu-238	3.44E+00
Pu-239	1.82E+01
Pu-240	6.85E+00
Pu-241	1.83E+02
Pu-242	4.04E-03
U-234	3.08E-05
U-235	1.40E-06
U-238	2.79E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

10.26 m3 of waste from Parks Township ROD 63FR3629, 65FR82985, 69FR39446 amended 27 February 2008 Point of Contact William Spurgeon (Any reference to 45m3, Matt Hutmaker, B&W is not related to BL-Parks)

Waste Stream ID: **BL-Parks-A**

Appendix C

TRU Waste Inventory Profile Report

Site	Babcock and Wilcox Nuclear Energy Services	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Source Information Not Compiled	Defense Determination	Pending Determination	Inventory Date	12/31/2007		
Stream Name	Parks Township TRU Orphan Waste	Activity Concentrations Decayed to CY			2000		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
Box - Misc	0.2	0.0	0.2
Current Form Total	0.4	0.0	0.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal POC - 6" w/ Liner	0.4	0.0	0.4
Final Form Total	0.4	0.0	0.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	320.70
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	213.60
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.35E-01
Pu-239	4.41E+00

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

10.26 m3 of waste from Parks Township ROD 63FR3629, 65FR82985, 69FR39446 amended 27 February 2008 Point of Contact William Spurgeon (Any reference to 45m3, Matt Hutmaker, B&W is not related to BL-Parks)

Waste Stream ID: **BT-T006**

Appendix C

TRU Waste Inventory Profile Report

Site	Bettis Atomic Power Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Discarding Excess/Expired Materials	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Neutron Sources	Activity Concentrations Decayed to CY			1967		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Shipping Assembly	49.1	0.0	49.1
Current Form Total	49.1	0.0	49.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
SLB2 (5' x 5' x 8) Dir Ld	50.9	0.0	50.9
Final Form Total	50.9	0.0	50.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	373.00
Aluminum-based Metals/Alloys	0.37
Other Metals	501.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.12
Plastics	353.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	216.30
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	9.77E-02
Cm-244	2.26E-11
Cs-137	1.89E-08
Pu-238	7.08E+01
Pu-239	6.27E-02
Pu-240	4.07E-03
Pu-241	1.52E+00
Sr-90	1.87E-08
U-234	4.89E-03
U-235	1.63E-09

Haz. Waste No(s).

D008

TRUCON Code(s)

320

Waste Stream Description

Neutron sources--(current form Source Capsule)

Waste Stream ID: **IN-BN161**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Firebrick Debris Waste	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.20
Aluminum-based Metals/Alloys	0.00
Other Metals	0.12
Other Inorganic Materials	230.00
Cellulosics	6.40
Rubber	0.00
Plastics	1.60
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.07
Soils/gravel	0.30
Vitrified	0.00
Packaging Material, Steel	0.00
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.81E-01
Np-237	7.86E-06
Pu-238	1.41E-01
Pu-239	3.33E+00
Pu-240	7.60E-01
Pu-241	5.72E+00
Pu-242	6.09E-05
U-234	2.09E-07
U-235	3.30E-08

Haz. Waste No(s).

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

TRUCON Code(s)

122/222, 125/225, 130/230

Waste Stream Description

The IN-BN161 waste stream contains firebrick debris waste. This waste was generated from maintenance activities in support of weapons fabrication and plutonium recovery operations at RFETS. Waste is estimated to contain a minimum of 50% by volume ceramic or brick debris (e.g., firebrick, ceramic refractories).

Waste Stream ID: **IN-BN211**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Filter	Waste Matrix Code	S5410	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Filter Debris Waste	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.62
Aluminum-based Metals/Alloys	1.30
Other Metals	0.18
Other Inorganic Materials	54.00
Cellulosics	24.00
Rubber	0.04
Plastics	3.00
Cements	5.20
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	0.00
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.31E-01
Cs-137	1.83E-09
Np-237	3.39E-05
Pu-238	1.36E-01
Pu-239	3.20E+00
Pu-240	7.38E-01
Pu-241	5.38E+00
Pu-242	6.05E-05
Sr-90	2.01E-09
U-234	3.38E-06
U-235	9.70E-07
U-238	6.45E-09

Haz. Waste No(s).

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

TRUCON Code(s)

119/219

Waste Stream Description

The IN-BN211 waste stream consists of filters, filter media, and insulation generated during maintenance activities in support of production, recovery, laboratory, waste treatment, and reasearch and development activities associated with plutonium operations at RF. Consists of debris that is estimated to be 50% by volume, or more, high-efficiency particulate air filters (HEPA) or other filters constructed of more than one material type (e.g., metal, inorganic non-metal, and organic materials).

Waste Stream ID: **IN-BN243**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5122	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Glass Debris Waste	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	1.00
Aluminum-based Metals/Alloys	0.00
Other Metals	8.90
Other Inorganic Materials	110.00
Cellulosics	0.79
Rubber	0.14
Plastics	12.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	0.00
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.18E-01
Cs-137	6.44E-10
Np-237	1.21E-05
Pu-238	2.99E-02
Pu-239	6.53E-01
Pu-240	1.46E-01
Pu-241	1.14E+00
Pu-242	1.43E-05
Sr-90	7.09E-10
U-234	3.72E-06
U-235	1.27E-06

Haz. Waste No(s).

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

TRUCON Code(s)

118/218, 125/225

Waste Stream Description

IN-BN243 (TRU glass debris) generated at RFETS from a variety of operations in support of weapons fabrication and manufacturing including plutonium production, purification and recovery, laboratory operations, reasearch and development maintenance and utility operations, and waste treatment. Waste that is estimated to contain a minimum of 50% by volume glass debris (e.g., leaded glass windows, bottles, light bulbs)

Waste Stream ID: **IN-BN252**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Combustible	Waste Matrix Code	S5311	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Leaded Rubber Debris Waste	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.07
Aluminum-based Metals/Alloys	0.00
Other Metals	18.00
Other Inorganic Materials	2.90
Cellulosics	0.06
Rubber	240.00
Plastics	0.83
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	0.00
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.43E-01
Cs-137	1.60E-09
Np-237	2.09E-04
Pu-238	1.80E-01
Pu-239	5.10E+00
Pu-240	1.09E+00
Pu-241	1.10E+01
Pu-242	1.19E-04
Sr-90	1.76E-09
U-234	1.70E-06
U-235	9.47E-07

Haz. Waste No(s).

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

TRUCON Code(s)

121/221, 123/223

Waste Stream Description

IN-BN252 (TRU leaded rubber debris) wastes were generated at RFETS from a variety of operations in support of weapons fabrication and manufacturing including plutonium production, purification and recovery, laboratory operations, research and development, maintenance and utility operations, and waste treatment. Waste is estimated to contain 50% or more by volume leaded rubber debris. IDCs ID-RF-339 and ID-RF-463.

Waste Stream ID: **IN-BN296**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5112	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Non-Special Source Metal	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	90.00
Aluminum-based Metals/Alloys	0.81
Other Metals	74.00
Other Inorganic Materials	3.40
Cellulosics	3.00
Rubber	0.81
Plastics	1.60
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.01
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	0.00
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.19E+00
Cs-137	1.47E-08
Np-237	5.02E-05
Pu-238	1.50E-01
Pu-239	3.13E+00
Pu-240	6.96E-01
Pu-241	5.16E+00
Pu-242	6.98E-05
Sr-90	1.60E-08
U-234	1.22E-06
U-235	5.45E-07
U-238	1.10E-06

Haz. Waste No(s).

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

TRUCON Code(s)

117/217, 125/225

Waste Stream Description

IN-BN296 consists of metal debris generated during production, recovery, purification, laboratory, waste treatment, maintenance, research and development and non-routine activities (e.g., fire cleanup, strip-outs) associated with plutonium operations at RFETS. This waste is comprised of IDCs 320, 321, 480, and 481. This waste is estimated to contain a minimum 50% by volume metal debris.

Waste Stream ID: **IN-BN304**

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TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5490	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Mound Debris Waste	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	20.00
Aluminum-based Metals/Alloys	0.30
Other Metals	24.00
Other Inorganic Materials	21.00
Cellulosics	4.40
Rubber	6.30
Plastics	6.10
Cements	0.00
Inorganic Matrix	0.01
Organic Matrix	0.00
Soils/gravel	0.09
Vitrified	0.00
Packaging Material, Steel	0.00
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.18E-01
Cs-137	1.18E-06
Np-237	6.16E-06
Pu-238	4.09E+01
Pu-239	7.55E-02
Pu-240	5.39E-02
Pu-241	2.64E-01
Pu-242	4.39E-05
Sr-90	1.29E-06
U-234	4.22E-06
U-235	1.06E-07
U-238	6.17E-05

Haz. Waste No(s).

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

TRUCON Code(s)

122/222, 125/225, 130/230

Waste Stream Description

"IN-BN304 (Mound debris waste) was generated from decontamination and decommissioning of gloveboxes, equipment and facilities for plutonium heat source production, isotope recovery, as well as operations in support of activities such as analytical laboratories, maintenance and utilities, and waste treatment. Waste that is estimated to contain at least 50% by volume debris waste materials."

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

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TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	RH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	RH TRU Debris waste from Reactor Technology Complex at the INL			Activity Concentrations Decayed to CY	N/A		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.0	20.8	20.8
Current Form Total	0.0	20.8	20.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	0.0	30.3	30.3
Final Form Total	0.0	30.3	30.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

This is new waste stream and was reported in TWBIR during last call. Draft AK report is being prepared to assure that the newly generated waste stream meets WIPP requirements. The waste is planned to be packaged in future (2009-2010). Approximately 100 drums (55 gallon) will be generated from this waste stream.

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

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TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Unknown	Waste Matrix Code	N/A	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	RH TRU Sludge Pan Container waste from Naval Reactor Facility at Idaho Site.			Activity Concentrations Decayed to CY	2008		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Sludge Pan Container	0.0	1.9	1.9
Current Form Total	0.0	1.9	1.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	0.0	27.6	27.6
Final Form Total	0.0	27.6	27.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.69E-03
Cs-137	8.26E+00
Pu-238	5.07E-01
Pu-239	1.35E-03
Pu-240	5.89E-04
Pu-241	5.72E-02
Pu-242	1.76E-06
Sr-90	7.78E+00
U-233	1.63E-03
U-234	6.04E-04
U-235	9.51E-07
U-238	9.21E-08

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This is a new waste stream and was not reported last year. AK information is being collected to assure that the waste stream meets WIPP requirement. There are 92 containers in storage. This waste stream is planned to be packaged in 2008-2011 time frame.

Waste Stream ID: **IN-SBW-01A**

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TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	RH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SBW Treatment - Steam Reforming - Carbonate Waste Form			Activity Concentrations Decayed to CY	2006		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Tank(s)	3520.0	0.0	3520.0
Current Form Total	3520.0	0.0	3520.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid - Dir Ld	599.0	0.0	599.0
Final Form Total	599.0	0.0	599.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	1360.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	560.60
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.24E-01
Am-243	2.84E-04
Cm-244	2.01E-03
Cs-137	2.89E+02
Np-237	4.01E-03
Pu-238	6.19E+00
Pu-239	6.71E-01
Pu-240	2.49E-01
Pu-241	2.53E+00
Pu-242	1.28E-04
Sr-90	1.89E+02
U-233	5.61E-05
U-234	8.93E-03
U-235	2.18E-04
U-238	2.14E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F005, U134

No TRUCON Codes Provided

Waste Stream Description

The liquid SBW would be transferred from the storage tanks to the steam reforming process over a 1.0-year period. The steam reforming process is a fluidized bed reactor that converts the metals dissolved in the nitric acid into a dry granular powder. The fluidized bed operates at temperature between 600 and 1000 degrees centigrade. The carbonate waste form would be removed from the fluidized bed and transferred to the canning facility and placed by 90% loading in to 72-B canisters (direct loaded). The carbonate waste form would be RH-TRU waste, dried to 1% moisture, and would generate approximately 673 canisters with a surface dose rate <100 Rem/hr.

Waste Stream ID: **IN-SBW-01B**

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TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SBW Treatment - Steam Reforming Process - Debris			Activity Concentrations Decayed to CY	2010		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid - Dir Ld	0.0	89.0	89.0
Current Form Total	0.0	89.0	89.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid - Dir Ld	0.0	89.0	89.0
Final Form Total	0.0	89.0	89.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	700.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	2.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	560.60
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.24E-03
Am-243	2.84E-06
Cm-244	2.01E-05
Cs-137	2.89E+00
Np-237	4.01E-05
Pu-238	6.19E-02
Pu-239	6.71E-03
Pu-240	2.49E-03
Pu-241	2.53E-02
Pu-242	1.28E-06
Sr-90	1.89E+00
U-233	5.61E-07
U-234	8.93E-05
U-235	2.18E-06
U-238	2.14E-06

Haz. Waste No(s).

D004, D005, D006,
D007, D008, D009,
D010, D011, F001,
F002, F005, U134

**No TRUCON
Codes Provided**

Waste Stream Description

The debris from the steam reforming process would include spent HEPA filters and other failed equipment.

Waste Stream ID: **IN-W146.699**

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TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3120	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	TRU HEAVY METAL SLUDGE	Activity Concentrations Decayed to CY			1989		

Waste Volume Detail (m³)

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

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.3	0.0	2.3
Final Form Total	2.3	0.0	2.3

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.24E-01
Cm-244	4.06E-01
Cs-137	3.07E+01
Pu-238	3.70E-01
Pu-239	3.03E-01
Sr-90	4.18E+01

Haz. Waste No(s).

D006, D007, D008,
D009, D011**No TRUCON
Codes Provided**

Waste Stream Description

The waste stream was sludge generated from four catch tanks that were removed from service. The sludge was generated from activity in the TRA Hot Cell and the TRA Chemistry Laboratories. This was generated only "one time."

Waste Stream ID: **IN-W159.1072**

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TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3125	Handling	CH
Source Cat.	Pollution Control or Waste Treatment Process	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	EVAPORATOR AND DISSOLVER SLUDGE:			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

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

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	0.00E+00
Pu-238	7.88E+02
Pu-239	5.85E+00
Pu-240	0.00E+00
Pu-241	0.00E+00
Pu-242	0.00E+00

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at Mound Laboratory, consists of dry evaporator and dissolver sludge and insoluble residue. The consistency ranges from powder to sand-like particles. Limited amounts of other noncombustible wastes including Content Codes 803, 805, 810, 813, 814, 826, and 832 may be included. A few containers may have limited amounts of beryllium-contaminated wastes including glass, paper, gloves, and sample precipitates.

There is a potential for and lack of information on fines. In addition the drums may contain free liquids. The expected organic content in the drums is less than 14lb/ft³. No explosive, pyrophoric, or corrosive materials should be in the waste.

After removal from the bottom of dissolver pots, the dried sludge is rinsed with nitric acid and dried on a hotplate. Dried sludges are packaged in 1/2-gallon metal cans and sealed in a PE bag, or else packed in 1/2-gallon plastic-coated cardboard cartons and sealed in a PE bag. Each container is assayed and placed in PVC or PE sleeve bags. Sleeve bags can hold up to 5 containers per bag. Up to 8 sleeve bags are placed in each prepared 55-gallon drum. Drums are prepared according to post-1972 procedures, with plywood spacers as needed between on top of the rigid drum liner lid.

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **IN-W169.193**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5300	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Dry Paper and Rags (RH)	Activity Concentrations Decayed to CY			1989		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	15.0	0.0	15.0
Current Form Total	15.0	0.0	15.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	15.0	0.0	15.0
Final Form Total	15.0	0.0	15.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	25.80
Other Inorganic Materials	19.10
Cellulosics	94.70
Rubber	40.10
Plastics	131.80
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.78E-01
Pu-238	2.11E-02
Pu-239	5.98E-01
Pu-240	1.36E-01
Pu-241	3.61E+00
Pu-242	9.75E-06
U-235	2.60E-06
U-238	8.48E-11

Haz. Waste No(s).

D008, D022, D029,
F001, F002, F003,
F005No TRUCON
Codes Provided

Waste Stream Description

This waste stream, generated at the RFETS, primarily consists of line- and nonline generated dry combustible materials such as paper, rags, plastics, rubber, cardboard, wood, and PE bottles. Wastes are primarily from decontamination and cleanup work and maybe from plutonium areas. Drums containing wastes from the Americium Recovery Line are lead-lined.

Waste Stream ID: **IN-W197.197**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5300	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Moist Paper and Rags (RH)	Activity Concentrations Decayed to CY			1989		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	15.8	0.0	15.8
Current Form Total	15.8	0.0	15.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	15.8	0.0	15.8
Final Form Total	15.8	0.0	15.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.50
Aluminum-based Metals/Alloys	0.00
Other Metals	1.40
Other Inorganic Materials	12.80
Cellulosics	33.10
Rubber	6.40
Plastics	50.60
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	8.23E-01
Pu-238	2.41E-02
Pu-239	6.82E-01
Pu-240	1.55E-01
Pu-241	4.12E+00
Pu-242	1.11E-05
U-235	9.73E-07

Haz. Waste No(s).

D001, D002, D008, D022, F001, F002, F003, F005

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at the RFETS, consists of damp or wet line- and nonline- generated combustible materials (paper, rags, plastics, rubber, cardboard, wood, and PE bottles from decontamination and cleanup work and maybe from plutonium areas.

Waste Stream ID: **IN-W198.204**

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TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Combustible	Waste Matrix Code	S5440	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Plastics, Teflon, Wash, PVC (RH)	Activity Concentrations Decayed to CY			1989		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.20
Other Inorganic Materials	15.30
Cellulosics	15.00
Rubber	49.70
Plastics	39.50
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.62E+00
Np-237	2.28E-05
Pu-238	3.13E-02
Pu-239	8.87E-01
Pu-240	2.01E-01
Pu-241	5.36E+00
Pu-242	5.11E-05
U-235	9.00E-08

Haz. Waste No(s).

D008, D022, D029,
F001, F002, F003,
F005No TRUCON
Codes Provided

Waste Stream Description

This waste stream, generated at the RFETS, consists of various types of plastics such as PE, PVE, teflon, and nonleaded rubber.

Waste Stream ID: **IN-W219.110**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3129	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SOLIDIFIED GRINDING SLUDGE, ETC.:			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	9.4	0.0	9.4
Current Form Total	9.4	0.0	9.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	9.4	0.0	9.4
Final Form Total	9.4	0.0	9.4

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	2500.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	4.34E-02
Pu-239	1.23E+00
Pu-240	2.79E-01
Pu-241	7.43E+00
Pu-242	2.01E-05

Haz. Waste No(s).

F001, F002

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at Bettis Atomic Power Laboratory, consists of solidified grinding sludge and associated filters, rags, etc. The sludge can contain abraded grinding wheel material, which includes diamond dust, aluminum oxide, carborundum, and rubber. The waste is in either powder or cakes and contains not more than 10% of other waste items.

There are high levels of fines. In addition the drums may contain free liquids. The estimated organic content is less than 1 lb/ft³. No particle size data are provided, but it is assumed that WIPP-WAC limits for fines would be exceeded. No free liquids should be present. No explosive, pyrophoric, or corrosive material should be in the waste.

Both 17c and 6m 55-gallon drums were used for packaging the waste. Fissile content was determined by calculating the weight difference by chemical analysis or by an assay gauge.

Waste Stream ID: **IN-W219.914**

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TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3120	Handling	RH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SOLIDIFIED GRINDING SLUDGE, ETC.:(RH)			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
RH Insert	0.4	0.0	0.4
Current Form Total	0.4	0.0	0.4

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	1.11
Other Inorganic Materials	11.97
Cellulosics	5.02
Rubber	0.00
Plastics	3.11
Cements	146.59
Inorganic Matrix	219.88
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	1.43E-02
Pu-239	4.06E-01
Pu-240	9.22E-02
Pu-241	2.45E+00
Pu-242	6.63E-06

Haz. Waste No(s).

F001, F002

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at Bettis Atomic Power Laboratory, consists of solidified grinding sludge and associated filters, rags, etc. The sludge can contain abraded grinding wheel material, which includes diamond dust, aluminum oxide, carborundum, and rubber. The waste is in either powder or cakes and contains not more than 10% of other waste items.

There are high levels of fines. In addition the drums may contain free liquids. The estimated organic content is less than 1 lb/ft³. No particle size data are provided, but it is assumed that WIPP-WAC limits for fines would be exceeded. No free liquids should be present. No explosive, pyrophoric, or corrosive material should be in the waste.

Both 17c and 6m 55-gallon drums were used for packaging the waste. Fissile content was determined by calculating the weight difference by chemical analysis or by an assay gauge.

Waste Stream ID: **IN-W245.1035**

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TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5121	Handling	RH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Unleached Raschig Rings (RH)	Activity Concentrations Decayed to CY			1989		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	246.20
Cellulosics	15.80
Rubber	0.00
Plastics	5.50
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.22E-02
Pu-238	1.52E-01
Pu-239	4.29E+00
Pu-240	9.74E-01
Pu-241	2.59E+01
Pu-242	7.00E-05

Haz. Waste No(s).

D001, D002, D008, F001

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at the RFETS, consists of boronated glass rings used to minimize neutron multiplication in liquid storage tanks. Unleached Raschig Rings were used from 1971-1979 as a separate stream and then combined with IDC 442. The rings are heat and chemical resistant borosilicate glass. Some of the rings were leached with nitric acid to recover the plutonium and then rinsed with water and dried.

Waste Stream ID: **IN-W247.524**

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TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5121	Handling	RH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Leached Raschig Rings (RH)			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	137.40
Cellulosics	16.50
Rubber	0.00
Plastics	7.20
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	5.16E-03
Pu-238	7.31E-02
Pu-239	2.07E+00
Pu-240	4.70E-01
Pu-241	1.25E+01
Pu-242	3.38E-05
U-235	4.12E-07

Haz. Waste No(s).

D002, D008, D028, D029, F001, F002, F003, F005

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at the RFETS, consists of boronated glass rings used to minimize neutron multiplication in liquid storage tanks. Unleached Raschig Rings were used from 1971-1979 as a separate stream and then combined with IDC 442. The rings are heat and chemical resistant borosilicate glass. Some of the rings were leached with nitric acid to recover the plutonium and then rinsed with water and dried.

Waste Stream ID: **IN-W259.552**

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TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Alpha Hot Cell	Activity Concentrations Decayed to CY			N/A		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	8.3	0.0	8.3
Current Form Total	8.3	0.0	8.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	10.2	0.0	10.2
Final Form Total	10.2	0.0	10.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	83.60
Aluminum-based Metals/Alloys	0.00
Other Metals	0.10
Other Inorganic Materials	2.10
Cellulosics	70.30
Rubber	6.30
Plastics	56.40
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-239	2.45E-01
Pu-240	2.71E-02
U-235	6.09E-05

Haz. Waste No(s).

D008

No TRUCON Codes Provided

Waste Stream Description

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

Waste Stream ID: **IN-W259.920**

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TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Alpha Hot Cell	Activity Concentrations Decayed to CY			N/A		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.3	0.0	2.3
Bin - Misc	7.0	0.0	7.0
Current Form Total	9.3	0.0	9.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.5	0.0	2.5
Final Form Total	2.5	0.0	2.5

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-239	1.80E-01
Pu-240	1.63E+00
U-235	4.06E-04

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

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

Waste Stream ID: **IN-W260.566**

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TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Unknown	Waste Matrix Code	S9000	Handling	RH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Solid Binary Scrap Powder (RH)			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	15.2	0.0	15.2
Current Form Total	15.2	0.0	15.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	15.2	0.0	15.2
Final Form Total	15.2	0.0	15.2

Waste Material Parameters

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

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at Bettis Atomic Power Laboratory, contains solid binary scap such as powder, pellets, or rods. The material is made of ceramic based UO₂ and ThO₂. Some "kilorods" or fuel rods constructed of fuel pellets within hollow zirconium tubes are also included.

Waste Stream ID: **IN-W283.964**

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TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5420	Handling	RH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Americium Process Residues: (RH)			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	90.40
Cellulosics	0.00
Rubber	0.00
Plastics	57.40
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

Haz. Waste No(s). D001, D002, D008, F002, F003
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No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at the RFETS, was shipped in 1972 and 1973 from renovation of the americium process recovery line. It consists of piping, flanges, valves, tools, equipment, PVC piping, glassware, glass filters, PE bottles, leaded glovebox gloves, paper and plastics. Some of these containers were lead-lined.

Waste Stream ID: **IN-W317.1029**

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TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Organics	Waste Matrix Code	S3211	Handling	RH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Leached and Cemented Resin (RH)	Activity Concentrations Decayed to CY			1989		

Waste Volume Detail (m³)

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

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.1	0.0	2.1
Final Form Total	2.1	0.0	2.1

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.73E+00
Pu-238	3.67E-01
Pu-239	1.04E+01
Pu-240	2.36E+00
Pu-241	6.28E+01
Pu-242	1.70E-04

Haz. Waste No(s).

D008, F001, F002

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at the RFETS, consists of anion and cation exchange resins used in the purification and recovery of plutonium and americium, respectively. The resins are leached and cemented before disposal.

Waste Stream ID: **IN-W322.851**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5190	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SAMPLE FUEL:			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

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

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	139.10
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	211.10
Packaging Material, Plastic	16.30
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-239	4.83E+00
Pu-240	1.00E+00
U-235	1.31E-04

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream was generated at the INEL. These wastes include actinide neutron sources, a radium needle, small vials of fuel, and metal containers of experimental fuel capsules.

The organic content is less than 14 lb/ft³. Combustibles, including packaging, may exceed 25 volume percent. The levels of dispersible fines should be within WIPP-WAC limits. No sludges or free liquids should be present. No explosive or pyrophoric materials should be in this waste.

These wastes are packaged three different ways, depending on when the packaging was done. Pu-Be sources packaged in 1975 were placed in a carbon steel pipe, which was cemented and encapsulated into the center of a 55-gallon drum. In 1978, Pu-Be sources were packaged in four 55-gallon drums. Wastes packed in 1980 were wrapped plastic, placed in paraffin lined 15-gallon drums, and then placed in 55-gallon drums.

Waste Stream ID: **IN-W322.952**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5190	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SAMPLE FUEL:			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	421.30
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-239	1.46E+01
Pu-240	3.03E+00
U-235	3.96E-04

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream was generated at the INEL. These wastes include actinide neutron sources, a radium needle, small vials of fuel, and metal containers of experimental fuel capsules.

The organic content is less than 14 lb/ft³. Combustibles, including packaging, may exceed 25 volume percent. The levels of dispersible fines should be within WIPP-WAC limits. No sludges or free liquids should be present. No explosive or pyrophoric materials should be in this waste.

These wastes are packaged three different ways, depending on when the packaging was done. Pu-Be sources packaged in 1975 were placed in a carbon steel pipe, which was cemented and encapsulated into the center of a 55-gallon drum. In 1978, Pu-Be sources were packaged in four 55-gallon drums. Wastes packed in 1980 were wrapped plastic, placed in paraffin lined 15-gallon drums, and then placed in 55-gallon drums.

Waste Stream ID: **IN-W323.562**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5440	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	COMBUSTIBLE LAB WASTE:			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

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

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	12.15
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.86
Cellulosics	70.39
Rubber	0.79
Plastics	7.03
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	211.10
Packaging Material, Plastic	16.30
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	7.18E-01
Pu-239	1.32E-01
Pu-241	1.54E+00
U-235	5.07E-05

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream was generated at the Argonne National Laboratory-West at the INEL. Most of the waste is organic and combustible materials including paper, wood, PVC and plastic containers and items, rubber gaskets and gloves, leather, rags, towels, Q-tips, tubing, filter media, abrasive media, and metal pieces. Small residuals of moderators and fuel are trapped on the filters. One of the 28 total drums of Content Code 153 waste is stored at the Transuranic Storage Area (TSA) for contact-handled waste. The other 27 drums are stored at the intermediate level transuranic storage facility (ILTSF) for remote handled waste.

The organic content may exceed 14 lb/ft³. Combustibles, including packaging, may exceed 25 volume percent. The levels of dispersible fines should be within WIPP-WAC limits. No sludges or free liquids should be present. No explosive or pyrophoric materials should be in this waste.

Individual waste items may be loose or plastic bagged. Combustibles and noncombustibles are segregated to separate waste cans. Each can is weighed and assayed. The inner waste cans are loaded into an outer waste drum, along with a lead shield plug. Assays are done for each can and for the drums.

The waste stream is non-mixed, because the lead is shielding only and not considered part of waste stream.

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **IN-W323.951**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5440	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	COMBUSTIBLE LAB WASTE:			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
RH Insert	1.5	0.0	1.5
Current Form Total	1.5	0.0	1.5

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	12.15
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.86
Cellulosics	70.39
Rubber	0.79
Plastics	7.03
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	7.74E-02
Pu-239	1.43E+00
Pu-241	1.65E+01
U-235	5.48E-04

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream was generated at the Argonne National Laboratory-West at the INEL. Most of the waste is organic and combustible materials including paper, wood, PVC and plastic containers and items, rubber gaskets and gloves, leather, rags, towels, Q-tips, tubing, filter media, abrasive media, and metal pieces. Small residuals of moderators and fuel are trapped on the filters. One of the 28 total drums of Content Code 153 waste is stored at the Transuranic Storage Area (TSA) for contact-handled waste. The other 27 drums are stored at the intermediate level transuranic storage facility (ILTSF) for remote handled waste.

The organic content may exceed 14 lb/ft³. Combustibles, including packaging, may exceed 25 volume percent. The levels of dispersible fines should be within WIPP-WAC limits. No sludges or free liquids should be present. No explosive or pyrophoric materials should be in this waste.

Individual waste items may be loose or plastic bagged. Combustibles and noncombustibles are segregated to separate waste cans. Each can is weighed and assayed. The inner waste cans are loaded into an outer waste drum, along with a lead shield plug. Assays are done for each can and for the drums.

The waste stream is non-mixed, because the lead is shielding only and not considered part of waste stream.

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **IN-W332.661**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3113	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SOLIDIFIED SOLUTIONS:			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	196.75
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	199.14
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	3.51E+00
Pu-239	2.49E-02

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste comes from Battelle Columbus Labs. It is a turco soap decontamination solution (used to decontaminate glove boxes from a Pu lab) which is solidified in plaster-of-paris.

Waste Stream ID: **IN-W337.673**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5121	Handling	CH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	AMERICIUM SOURCES:			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	2150.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-239	1.46E+01
Pu-240	3.03E+00
U-235	3.96E-04

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste was generated at the Idaho National Engineering Laboratory. It consists of an americium neutron source. No other wastes were included in the drum.

The waste was placed in a carbon steel pipe which was centered in the 55-gallon drum. Cement was added to fill the annular space between the pipe and drum and encapsulate the pipe containing the source.

Waste Stream ID: **IN-W337.957**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5121	Handling	CH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	AMERICIUM SOURCES:			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	139.10
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-239	4.83E+00
Pu-240	1.00E+00
U-235	1.31E-04

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste was generated at the Idaho National Engineering Laboratory. It consists of an americium neutron source. No other wastes were included in the drum.

The waste was placed in a carbon steel pipe which was centered in the 55-gallon drum. Cement was added to fill the annular space between the pipe and drum and encapsulate the pipe containing the source.

Waste Stream ID: **IN-W341.671**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5440	Handling	CH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	ANL-W HFEF ANALYTICAL CHEMISTRY AND META:			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
RH Insert	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

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

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-239	9.39E+00
U-235	1.33E-03

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This wastestream, which was generated at ANL-W was generated during analytical chemistry and metallography operations. Item Description Code (IDC) 153 was replaced by IDC 160, ANL-W HFEF Analytical Chemistry and Metallographic Combsutibles. The waste package contains lead as shielding.

Waste Stream ID: **IN-W341.954**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5440	Handling	CH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	ANL-W HFEF ANALYTICAL CHEMISTRY AND META:			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
RH Insert	0.2	0.0	0.2
Current Form Total	0.2	0.0	0.2

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

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-239	3.10E+00
U-235	4.38E-04

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This wastestream, which was generated at ANL-W was generated during analytical chemistry and metallography operations. Item Description Code (IDC) 153 was replaced by IDC 160, ANL-W HFEF Analytical Chemistry and Metallographic Combsutibles. The waste package contains lead as shielding.

Waste Stream ID: **IN-W342.652**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5420	Handling	RH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	MISCELLANEOUS SOURCES:			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

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

Final Form Volumes			
Container Type	Stored	Proj.	Total
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.3	0.0	0.3
Final Form Total	0.3	0.0	0.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	111.26
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	198.40
Packaging Material, Plastic	23.90
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.46E+00
Pu-239	2.13E-02

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

There is no descriptive or constituent information available for this waste, which was generated at ANL-W. Based on engineering judgment, the waste was assigned to "Inorganic Homogeneous Solids." The waste is assumed to be metallic but of a size that is too small to qualify as debris.

Waste Stream ID: **IN-W342.953**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5420	Handling	RH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	MISCELLANEOUS SOURCES:			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	337.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.47E+00
Pu-239	6.46E-02

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

There is no descriptive or constituent information available for this waste, which was generated at ANL-W. Based on engineering judgment, the waste was assigned to "Inorganic Homogeneous Solids." The waste is assumed to be metallic but of a size that is too small to qualify as debris.

Waste Stream ID: **IN-W347.818**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3113	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	ABSORBED LIQUIDS:			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	22.3	0.0	22.3
Bin - Misc	45.5	0.0	45.5
Current Form Total	67.8	0.0	67.8

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	63.97
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	137.01
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.75E-02
Pu-239	4.97E-01
Pu-240	8.85E-01
Pu-242	0.00E+00
Th-232	1.86E-07
U-235	5.97E-07
U-238	6.35E-06

Haz. Waste No(s).

D001, F003

No TRUCON Codes Provided

Waste Stream Description

This waste comes from Argonne National Laboratory-East. It consists of liquids adjusted to pH 10 using NaOH which are then absorbed in vermiculite.

Waste Stream ID: **IN-W350.650**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Unknown	Waste Matrix Code	S9000	Handling	CH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SPECIAL SOURCE MATERIAL:			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-239	5.74E+01
Pu-240	1.76E+02

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

There is no descriptive or constituent information available for this waste, which was generated at ANL-E.

Waste Stream ID: **IN-W350.923**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Unknown	Waste Matrix Code	S9000	Handling	CH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SPECIAL SOURCE MATERIAL:			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-239	5.74E+01
Pu-240	1.76E+02

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

There is no descriptive or constituent information available for this waste, which was generated at ANL-E.

Waste Stream ID: **IN-W353.859**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3113	Handling	CH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SOLIDIFIED SOLUTIONS:			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Np-237	3.33E-04
Pu-239	1.20E-01

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream is from Bettis Atomic Power Laboratory. It consists of a single drum of TRU. No more information is available, but the waste is thought to be solidified inorganic solutions.

Waste Stream ID: **IN-W353.917**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3113	Handling	CH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	SOLIDIFIED SOLUTIONS:			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	461.00
Cellulosics	0.00
Rubber	0.00
Plastics	4.24
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Np-237	3.33E-04
Pu-239	1.20E-01

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream is from Bettis Atomic Power Laboratory. It consists of a single drum of TRU. No more information is available, but the waste is thought to be solidified inorganic solutions.

Waste Stream ID: **IN-W358.854**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5420	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	PU NEUTRON SOURCES:			Activity Concentrations Decayed to CY	1995		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	31.76
Aluminum-based Metals/Alloys	0.26
Other Metals	0.03
Other Inorganic Materials	0.79
Cellulosics	26.71
Rubber	2.41
Plastics	21.43
Cements	2150.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	2.19E+02
Pu-239	9.97E-01
Pu-240	1.92E+00

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream was generated at Argonne National Laboratory-West at the INEL. These wastes consist of noncombustible materials including Pu-Be neutron sources (small fuel samples, small sections of moderator, a pu standard, and pu foil), tools, hot cell operating equipment, various containers, and ferrous and nonferrous metals. Some combustible materials may include paper, plastic and PVC containers, rags, Q-tips, string mop heads, and an electrical plug strip and cord.

The organic content is less than 14 lb/ft³. Combustibles, including packaging, may exceed 25 volume percent. The levels of dispersible fines should be within WIPP-WAC limits. No sludges or free liquids should be present. No explosive or pyrophoric materials should be in this waste.

These wastes are packaged three different ways, depending on when the packaging was done. Pu-Be sources packaged in 1975 were placed in a carbon steel pipe, which was cemented and encapsulated into the center of a 55-gallon drum. In 1978, Pu-Be sources were packaged in four 55-gallon drums. Wastes packed in 1980 were wrapped plastic, placed in paraffin lined 15 gallon drums, and then placed in 55-gallon drums. Some individual items may be unbagged.

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **IN-W358.855**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5420	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	PU NEUTRON SOURCES:			Activity Concentrations Decayed to CY	1995		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Bin - Misc	7.0	0.0	7.0
Current Form Total	7.0	0.0	7.0

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	96.20
Aluminum-based Metals/Alloys	0.80
Other Metals	0.10
Other Inorganic Materials	2.40
Cellulosics	80.90
Rubber	7.30
Plastics	64.90
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	6.65E+02
Pu-239	3.02E+00
Pu-240	5.81E+00

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream was generated at Argonne National Laboratory-West at the INEL. These wastes consist of noncombustible materials including Pu-Be neutron sources (small fuel samples, small sections of moderator, a pu standard, and pu foil), tools, hot cell operating equipment, various containers, and ferrous and nonferrous metals. Some combustible materials may include paper, plastic and PVC containers, rags, Q-tips, string mop heads, and an electrical plug strip and cord.

The organic content is less than 14 lb/ft³. Combustibles, including packaging, may exceed 25 volume percent. The levels of dispersible fines should be within WIPP-WAC limits. No sludges or free liquids should be present. No explosive or pyrophoric materials should be in this waste.

These wastes are packaged three different ways, depending on when the packaging was done. Pu-Be sources packaged in 1975 were placed in a carbon steel pipe, which was cemented and encapsulated into the center of a 55-gallon drum. In 1978, Pu-Be sources were packaged in four 55-gallon drums. Wastes packed in 1980 were wrapped plastic, placed in paraffin lined 15 gallon drums, and then placed in 55-gallon drums. Some individual items may be unbagged.

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **IN-W358.948**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5420	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	PU NEUTRON SOURCES:			Activity Concentrations Decayed to CY	1995		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	96.20
Aluminum-based Metals/Alloys	0.80
Other Metals	0.10
Other Inorganic Materials	2.40
Cellulosics	80.90
Rubber	7.30
Plastics	64.90
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	2.21E+03
Pu-239	1.01E+01
Pu-240	1.93E+01

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream was generated at Argonne National Laboratory-West at the INEL. These wastes consist of noncombustible materials including Pu-Be neutron sources (small fuel samples, small sections of moderator, a pu standard, and pu foil), tools, hot cell operating equipment, various containers, and ferrous and nonferrous metals. Some combustible materials may include paper, plastic and PVC containers, rags, Q-tips, string mop heads, and an electrical plug strip and cord.

The organic content is less than 14 lb/ft³. Combustibles, including packaging, may exceed 25 volume percent. The levels of dispersible fines should be within WIPP-WAC limits. No sludges or free liquids should be present. No explosive or pyrophoric materials should be in this waste.

These wastes are packaged three different ways, depending on when the packaging was done. Pu-Be sources packaged in 1975 were placed in a carbon steel pipe, which was cemented and encapsulated into the center of a 55-gallon drum. In 1978, Pu-Be sources were packaged in four 55-gallon drums. Wastes packed in 1980 were wrapped plastic, placed in paraffin lined 15 gallon drums, and then placed in 55-gallon drums. Some individual items may be unbagged.

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **IN-W358.949**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Uncategorized Metal	Waste Matrix Code	S5420	Handling	RH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	PU NEUTRON SOURCES:(RH)			Activity Concentrations Decayed to CY	1995		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
RH Insert	1.3	0.0	1.3
Current Form Total	1.3	0.0	1.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	5.3	0.0	5.3
Final Form Total	5.3	0.0	5.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	55.60
Aluminum-based Metals/Alloys	0.46
Other Metals	0.06
Other Inorganic Materials	1.39
Cellulosics	46.76
Rubber	4.22
Plastics	37.51
Cements	2150.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	4.66E+02
Pu-239	2.12E+00
Pu-240	4.07E+00

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream was generated at Argonne National Laboratory-West at the INEL. These wastes consist of noncombustible materials including Pu-Be neutron sources (small fuel samples, small sections of moderator, a pu standard, and pu foil), tools, hot cell operating equipment, various containers, and ferrous and nonferrous metals. Some combustible materials may include paper, plastic and PVC containers, rags, Q-tips, string mop heads, and an electrical plug strip and cord.

The organic content is less than 14 lb/ft³. Combustibles, including packaging, may exceed 25 volume percent. The levels of dispersible fines should be within WIPP-WAC limits. No sludges or free liquids should be present. No explosive or pyrophoric materials should be in this waste.

These wastes are packaged three different ways, depending on when the packaging was done. Pu-Be sources packaged in 1975 were placed in a carbon steel pipe, which was cemented and encapsulated into the center of a 55-gallon drum. In 1978, Pu-Be sources were packaged in four 55-gallon drums. Wastes packed in 1980 were wrapped plastic, placed in paraffin lined 15 gallon drums, and then placed in 55-gallon drums. Some individual items may be unbagged.

Comprehensive Inventory Database ver. 1.00

Data ver. D.7.00

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

Waste Stream ID: **IN-W359.853**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Unknown	Waste Matrix Code	S9000	Handling	RH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	NEUTRON SOURCES	Activity Concentrations Decayed to CY			1989		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	1.41E+02

No Hazardous Waste Numbers Provided

TRUCON Code(s)
111/211

Waste Stream Description

There is no descriptive or constituent information available for this waste, which was generated at Bettis Atomic Power Laboratory.

Waste Stream ID: **IN-W360.852**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Unknown	Waste Matrix Code	S9000	Handling	RH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	MISCELLANEOUS SOURCES:RH			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	111.50
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	2.87E-01
Pu-239	8.14E+00
Pu-240	1.85E+00
Pu-241	4.91E+01
Pu-242	1.33E-04

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

There is no descriptive or constituent information available for this waste, which was generated at Bettis Atomic Power Laboratory.

Waste Stream ID: **IN-W360.912**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Unknown	Waste Matrix Code	S9000	Handling	RH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	MISCELLANEOUS SOURCES:			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

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

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

There is no descriptive or constituent information available for this waste, which was generated at Bettis Atomic Power Laboratory.

Waste Stream ID: **IN-W364.845**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5190	Handling	RH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Sand, Slag, and Crucibles (RH)			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	146.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	560.60
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	3.42E+00
Pu-239	9.67E+01
Pu-240	2.19E+01
Pu-241	5.84E+02
Pu-242	1.58E-03

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Specific information is not available for this content code. The waste stream is thought to be similar to content code 391, crucibles and sand. The operation which generated the waste is unknown. The waste packaging and handling procedures are unknown, although the waste form is thought to be similar to content code 391.

Waste Stream ID: **IN-W365.843**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5190	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Crucibles and Sand (RH)	Activity Concentrations Decayed to CY			1989		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	175.57
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.22E+02
Pu-238	1.57E+00
Pu-239	4.43E+01
Pu-240	1.01E+01
Pu-241	2.68E+02
Pu-242	7.23E-04

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste consists of broken magnesium oxide crucibles and limited amounts of magnesium oxide sand, used in a molten salt cleanup project when reducing plutonium tetrafluoride to plutonium metal. Above-discard levels of plutonium were recovered from these crucibles by nitric acid leaching.

The waste stream handling and packaging is as follows: the crucibles were placed into 1-gallon PE bottles. Each bottle was double-bagged out the glovebox in PVC and PE bags. Each bottle was assayed and the placed in prepared 55 gallon drums, about 12-16 bottles per drum. Some of the drums were lead-lined. Prior to 1972, the drums were lined with one or two PE bags, which were sealed with tape. Some of the drums may have cardboard liners inside of the inner liner. After 1972, 90-mil sealed rigid liners were used in addition to one or two PE bags.

Since 1972, drums were inspected (and corrected where needed) for free liquids, proper packaging, and proper content code. One to two quarts of Oil-dri was placed on the outer sealed PE drum bag. Starting in February 1982, 3-12 lb of vermiculite was used to fill the space between the outer drum bag and the rigid liner.

Waste Stream ID: **IN-W372.832**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Unknown	Waste Matrix Code	X7900	Handling	CH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	MET SAMPLES FISSILE:			Activity Concentrations Decayed to CY	1989		

Waste Volume Detail (m³)

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

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB w/ 4 - 55-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	111.26
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	211.10
Packaging Material, Plastic	16.30
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.46E+00
Pu-239	2.13E-02

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

There is no descriptive or constituent information available for this waste, which was generated at Bettis Atomic Power Laboratory.

Waste Stream ID: **IN-W372.918**

Appendix C

TRU Waste Inventory Profile Report

Site	Idaho National Laboratory	Final Waste Form	Unknown	Waste Matrix Code	X7900	Handling	RH
Source Cat.	Source Information Not Compiled	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	MET SAMPLES FISSILE:(RH)			Activity Concentrations Decayed to CY	1995		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	2.9	0.0	2.9
Current Form Total	2.9	0.0	2.9

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	270.87
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.54E-02
Cs-137	5.51E-02
Pu-238	3.12E-02
Pu-239	8.20E-04

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

There is no descriptive or constituent information available for this waste, which was generated at Bettis Atomic Power Laboratory.

Waste Stream ID: LA-LA238HOR

Appendix C

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3120	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Pu-238 Homogeneous, Hazardous			Activity Concentrations Decayed to CY	2006		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	4.6	6.4	11.0
55-gal POC - 12" w/ Liner	2.5	0.0	2.5
Current Form Total	7.1	6.4	13.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	4.6	6.4	11.0
55-gal POC - 12" w/ Liner	2.5	0.0	2.5
Final Form Total	7.1	6.4	13.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.03
Cements	0.00
Inorganic Matrix	4.77
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	204.02
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	25.38
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.12E-01
Pu-238	2.75E+02
Pu-239	1.65E-01
Pu-240	8.42E-02
Pu-241	6.16E+00
Pu-242	6.76E-05

Haz. Waste No(s).

D005, D006, D007, D008, D009, D010, D011

TRUCON Code(s)

121/221, 122/222

Waste Stream Description

Pu-238 Homogeneous, Hazardous

Waste Stream ID: LA-TA-03-17

Appendix C

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Hepa Filters				Activity Concentrations Decayed to CY	1972	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Crate	19.2	0.0	19.2
Current Form Total	19.2	0.0	19.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	11.3	0.0	11.3
Final Form Total	11.3	0.0	11.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	90.43
Aluminum-based Metals/Alloys	0.00
Other Metals	30.09
Other Inorganic Materials	145.73
Cellulosics	116.97
Rubber	11.90
Plastics	344.25
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	0.00E+00
Pu-239	0.00E+00
U-235	0.00E+00

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Hepa Filters

Waste Stream ID: LA-TA-03-21

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TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Metals and Miscellaneous Equipment Debris			Activity Concentrations Decayed to CY	1972		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Crate	2.8	0.0	90.6
Current Form Total	90.6	0.0	90.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	56.7	0.0	56.7
Final Form Total	56.7	0.0	56.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	25.18
Aluminum-based Metals/Alloys	0.00
Other Metals	8.38
Other Inorganic Materials	40.58
Cellulosics	32.57
Rubber	3.31
Plastics	95.86
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	0.00E+00
Pu-238	0.00E+00
Pu-239	0.00E+00
U-233	0.00E+00

Haz. Waste No(s).

D008

No TRUCON Codes Provided

Waste Stream Description

Metals and Miscellaneous Equipment Debris

Waste Stream ID: LA-TA-03-23

Appendix C

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Hepa Filters	Activity Concentrations Decayed to CY			1973		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Crate	16.0	0.0	66.4
Current Form Total	66.4	0.0	66.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	41.6	0.0	41.6
Final Form Total	41.6	0.0	41.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	27.12
Aluminum-based Metals/Alloys	0.00
Other Metals	9.03
Other Inorganic Materials	43.71
Cellulosics	35.08
Rubber	3.57
Plastics	103.25
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	0.00E+00
Pu-239	0.00E+00
U-235	0.00E+00

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Hepa Filters

Waste Stream ID: LA-TA-21-18

Appendix C

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Miscellaneous Glovebox Debris	Activity Concentrations Decayed to CY			1979		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - FRP	14.8	0.0	14.8
Current Form Total	14.8	0.0	14.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	9.5	0.0	9.5
Final Form Total	9.5	0.0	9.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.06E+00
Np-237	8.99E-05
Pu-238	2.09E+00
Pu-239	8.56E+00
Pu-240	3.43E+00
Pu-241	1.73E+02
Pu-242	1.90E-05

Haz. Waste No(s).

D008

No TRUCON
Codes Provided

Waste Stream Description

Miscellaneous Glovebox Debris

Waste Stream ID: LA-TA-55-52

Appendix C

TRU Waste Inventory Profile Report

Site	Los Alamos National Laboratory	Final Waste Form	Solidified Organics	Waste Matrix Code	S3200	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Likely Defense-Related	Inventory Date	12/31/2007		
Stream Name	Oil on vermiculite, corrosive waste not for disposal at WIPP (mixed).			Activity Concentrations Decayed to CY	1998		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.18
Aluminum-based Metals/Alloys	0.18
Other Metals	0.18
Other Inorganic Materials	0.18
Cellulosics	0.18
Rubber	0.18
Plastics	0.18
Cements	0.00
Inorganic Matrix	165.82
Organic Matrix	828.39
Soils/gravel	110.61
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.01E+00
Pu-238	5.95E+01
Pu-239	7.13E+00
Pu-240	2.12E+00
Pu-241	3.77E+01
Pu-242	2.50E-04
U-235	4.39E-05
U-238	3.66E-06

Haz. Waste No(s).

D019

TRUCON Code(s)

112/212

Waste Stream Description

Solidified Organic Oil on vermiculite, corrosive waste not for disposal at WIPP (mixed).

Waste Stream ID: **LB-T004**

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TRU Waste Inventory Profile Report

Site	Lawrence Berkeley Laboratory	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	TRU Non mixed sources				Activity Concentrations Decayed to CY	1997	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
12.2-gal Drum	0.2	0.0	0.3
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
5-gal Drum	0.0	0.0	0.0
Current Form Total	0.5	0.0	0.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal S100 POC - 6" w/ Liner	0.6	0.2	0.8
Final Form Total	0.6	0.2	0.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	320.70
Packaging Material, Plastic	713.00
Packaging Material, Cellulosics	69.70
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.20E-01
Cm-244	7.90E-03
Pu-238	4.50E-05
Pu-240	6.70E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s) 125/225

Waste Stream Description

Non mixed sources

Waste Stream ID: MC-W002

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TRU Waste Inventory Profile Report

Site	U.S. Army Materiel Command	Final Waste Form	Heterogeneous	Waste Matrix Code	S5110	Handling	CH
Source Cat.	Discarding Excess/Expired Materials	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	USAMC TRU Waste	Activity Concentrations Decayed to CY			1995		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
30-gal Drum	0.1	0.0	0.1
Current Form Total	0.1	0.0	0.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal S100 POC - 6" w/ Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	190.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	320.70
Packaging Material, Plastic	713.00
Packaging Material, Cellulosics	69.70
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.40E+00

Haz. Waste No(s).

D003

TRUCON Code(s)

120/220

Waste Stream Description

Army sealed sources

Waste Stream ID: ND-T001

Appendix C

TRU Waste Inventory Profile Report

Site	NRD, Inc.	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Pending Determination	Inventory Date	12/31/2007		
Stream Name	AmO2 Bagout/ Silver Bagout	Activity Concentrations Decayed to CY			2007		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	13.9	2.1	16.0
Box - Crate	1.5	3.0	4.5
Current Form Total	15.4	5.1	20.5

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	13.9	2.1	16.0
SWB Dir Ld w/o Liner	1.9	3.8	5.7
Final Form Total	15.8	5.9	21.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	90.10
Aluminum-based Metals/Alloys	0.00
Other Metals	4.50
Other Inorganic Materials	2.30
Cellulosics	90.10
Rubber	13.50
Plastics	22.50
Cements	0.00
Inorganic Matrix	225.30
Organic Matrix	4.50
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	136.74
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.73E+01

Haz. Waste No(s).

D008, D011, D035,
D040, F001, F002,
F005

TRUCON Code(s)

125/225

Waste Stream Description

AmO₂ Bagout- Material generated from the production of ionization sources containing Am-241. Material consists mainly of consumable items used in the production gloveboxes(e.g tissues paper towels, graphite blocks) but also includes equipment and tools that have exceeded their useful life. Most material is contained in one gallon cans that are placed into fifty five gallon drums. Silver Bagout- Material is mainly a vitrified slag that is created during the recovery of precious metals from scrap Am-241 foil. Also contained are items used in the glovebox during the recovery process (e.g. plastic bags, Carbon/Graphite crucibles, paper towels, induction furnaces).

Waste Stream ID: **OR-W233**

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TRU Waste Inventory Profile Report

Site	Oak Ridge National Laboratory	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	RH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A				Activity Concentrations Decayed to CY	2012	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Drum - ORNL U233	0.0	145.6	145.6
Current Form Total	0.0	145.6	145.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	0.0	208.3	208.3
Final Form Total	0.0	208.3	208.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	2600.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	1.25E+00
Pu-239	4.00E-02
Pu-240	2.00E-02
Pu-241	4.88E+00
Pu-242	2.62E-05
Th-229	6.00E-02
U-233	1.89E+01
U-234	2.66E+00
U-235	4.00E-02
U-236	7.00E-02
U-238	8.40E-01

Haz. Waste No(s).

D006, D007

No TRUCON Codes Provided

Waste Stream Description

Uranium-bearing TRU Waste

Waste Stream ID: **RL105-09A**

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TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	105KE knockout pots TRU RH mixed solidified inorganics			Activity Concentrations Decayed to CY	2001		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Uncontained	4.2	0.0	4.2
Current Form Total	4.2	0.0	4.2

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	212.02
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	7.91
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	778.27
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.39E-01
Cs-137	2.20E+01
Pu-238	2.48E-02
Pu-239	1.03E-01
Pu-240	5.48E-02
Pu-241	7.93E-01
Sr-90	8.80E+00
U-234	6.94E-04
U-235	3.35E-05
U-238	3.72E-04

No Hazardous Waste Numbers Provided

TRUCON Code(s)
311

Waste Stream Description

The waste is generated from Facility/Equipment Operation and Maintenance Waste activities at the REACTOR FACILITY.

Waste Stream ID: **RL300-08**

Appendix C

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	300 Area TRU RH Mixed Debris	Activity Concentrations Decayed to CY			2001		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	28.9	0.0	28.9
85-gal Drum Dir Ld w/ Liner	1.3	0.0	1.3
Box - Misc	164.7	0.0	164.7
SWB Dir Ld w/ Liner	3.8	0.0	3.8
Current Form Total	198.7	0.0	198.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	234.1	0.0	234.1
Final Form Total	234.1	0.0	234.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	61.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	467.03
Cellulosics	15.25
Rubber	0.00
Plastics	3.81
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.10E+00
Am-243	2.63E-02
Cm-244	3.04E+00
Cs-137	1.85E+04
Np-237	1.03E-04
Pu-238	1.21E+00
Pu-239	3.00E-01
Pu-240	3.37E-01
Pu-241	3.17E+01
Pu-242	1.17E-03
Pu-244	1.31E-13
Sr-90	1.33E+04
Th-232	4.15E-07
U-233	7.89E-04
U-234	3.14E-04
U-235	6.23E-06
U-236	6.99E-05
U-238	1.96E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D033, D034, D036, D037, D039, D040, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **RL618-01**

Appendix C

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	618 - 10&11 Burial Grounds TRU Mixed Debris			Activity Concentrations Decayed to CY	2006		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Uncontained	249.4	0.0	249.4
Current Form Total	249.4	0.0	249.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	249.5	0.0	249.5
Final Form Total	249.5	0.0	249.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	13.39
Aluminum-based Metals/Alloys	0.00
Other Metals	24.10
Other Inorganic Materials	23.22
Cellulosics	1.79
Rubber	3.57
Plastics	3.57
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	8.93
Soils/gravel	8.93
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.80E-02
Cs-137	2.43E+01
Pu-238	2.00E-04
Pu-239	8.30E-01
Pu-240	7.90E-02
Pu-241	7.00E-02
Pu-242	1.00E-06
Sr-90	2.22E+01

No Hazardous Waste Numbers Provided

TRUCON Code(s) 125/225

Waste Stream Description

Retrieved containerized debris waste from Burial Grounds 618 - 10 and 11

Waste Stream ID: **RL618-07**

Appendix C

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	618 - 10&11 Burial Grounds TRU RH Non-mixed Debris			Activity Concentrations Decayed to CY	2006		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Uncontained	953.0	0.0	953.0
Current Form Total	953.0	0.0	953.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	953.2	0.0	953.2
Final Form Total	953.2	0.0	953.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	184.11
Aluminum-based Metals/Alloys	0.00
Other Metals	332.00
Other Inorganic Materials	356.00
Cellulosics	24.55
Rubber	49.10
Plastics	49.10
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	122.74
Soils/gravel	122.74
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.80E-02
Cs-137	2.43E+01
Pu-238	2.00E-04
Pu-239	8.30E-01
Pu-240	7.90E-02
Pu-241	7.00E-02
Pu-242	1.00E-06
Sr-90	2.22E+01

No Hazardous Waste Numbers Provided

TRUCON Code(s)
325

Waste Stream Description

Retrieved containerized debris waste from Burial Grounds 618 - 10 and 11.

Waste Stream ID: **RLCH2-08**

Appendix C

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Tank Farms TRU RH Mixed Debris	Activity Concentrations Decayed to CY			2001		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Uncontained	319.0	0.0	319.0
Current Form Total	319.0	0.0	319.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	319.5	0.0	319.5
Final Form Total	319.5	0.0	319.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	2.99
Aluminum-based Metals/Alloys	0.00
Other Metals	362.87
Other Inorganic Materials	7.16
Cellulosics	0.00
Rubber	44.56
Plastics	12.39
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	26.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.24E+00
Am-243	1.24E-03
Cs-137	4.64E-01
Np-237	2.02E-04
Pu-238	6.99E-02
Pu-239	1.31E+00
Pu-240	2.95E-01
Pu-241	3.82E+00
Pu-242	2.57E-05
Sr-90	7.75E-01
U-233	3.27E-04
U-234	3.63E-03
U-235	1.44E-04
U-236	2.87E-04
U-238	2.74E-03

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

Waste Stream Description

Equipment removed from waste tanks (instrument trees, pumps, circulators, agitators, heaters, sluicers, steam coils, air lances, cameras). The waste stream ranges from contaminated clothing to process equipment contaminated with RCRA constituents.

Waste Stream ID: **RLRFET-01**

Appendix C

TRU Waste Inventory Profile Report

Site	Hanford (Richland) Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Rocky Flats TRU Mixed Debris				Activity Concentrations Decayed to CY	1984	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	202.6	0.0	202.6
Current Form Total	202.6	0.0	202.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	253.3	0.0	253.3
Final Form Total	253.3	0.0	253.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	362.70
Aluminum-based Metals/Alloys	50.51
Other Metals	15.18
Other Inorganic Materials	67.36
Cellulosics	38.72
Rubber	9.19
Plastics	34.16
Cements	0.00
Inorganic Matrix	6.41
Organic Matrix	0.01
Soils/gravel	6.80
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	3.18E-01
Pu-238	4.25E-03
Pu-239	1.61E-02
Pu-240	9.12E-03
Pu-241	3.51E-01
Pu-242	3.68E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s)
125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: RP-TFC001

Appendix C

TRU Waste Inventory Profile Report

Site	Hanford (River Protection) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Bismuth Phosphate Process TRU Solids			Activity Concentrations Decayed to CY	2004		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Tank(s)	1200.0	0.0	1200.0
Current Form Total	1200.0	0.0	1200.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	438.7	0.0	438.7
Final Form Total	438.7	0.0	438.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	1.60
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	7.37E-02
Cs-137	6.11E-01
Np-237	1.22E-05
Pu-238	6.60E-03
Pu-239	5.16E-01
Pu-240	6.23E-02
Pu-241	1.89E-01
Pu-242	3.08E-06
Sr-90	7.98E+00
U-233	1.10E-09
U-234	1.68E-03
U-235	5.42E-05
U-236	1.62E-05
U-238	1.24E-03

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D030, D033, D034, D035, D036, D038, D039, D040, D041, D043, F001, F002, F003, F004, F005

No TRUCON Codes Provided

Waste Stream Description

Solidified aqueous waste slurry

Waste Stream ID: RP-TFC002

Appendix C

TRU Waste Inventory Profile Report

Site	Hanford (River Protection) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	RH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Bismuth Phosphate Process TRU Solids mixed with Fission Product Waste			Activity Concentrations Decayed to CY	2004		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Tank(s)	3040.0	0.0	3040.0
Current Form Total	3040.0	0.0	3040.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid - Dir Ld	1918.8	0.0	1918.8
Final Form Total	1918.8	0.0	1918.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	1.37
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	560.60
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.50E-01
Cs-137	1.05E+02
Np-237	1.31E-04
Pu-238	6.07E-03
Pu-239	3.64E-01
Pu-240	4.17E-02
Pu-241	1.11E-01
Pu-242	9.86E-07
Sr-90	2.46E+02
U-233	6.57E-04
U-234	1.81E-03
U-235	8.00E-05
U-236	2.16E-05
U-238	1.83E-03

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D030, D033, D034, D035, D036, D038, D039, D040, D041, D043, F001, F002, F003, F004, F005

No TRUCON Codes Provided

Waste Stream Description

Solidified aqueous waste slurry

Waste Stream ID: **RP-TFC003**

Appendix C

TRU Waste Inventory Profile Report

Site	Hanford (River Protection) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	RH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Bismuth Phosphate Process TRU Solids mixed with Fission Product Waste			Activity Concentrations Decayed to CY	2004		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Tank(s)	370.0	0.0	370.0
Current Form Total	370.0	0.0	370.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid - Dir Ld	258.1	0.0	258.1
Final Form Total	258.1	0.0	258.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	1.37
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	560.60
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.36E-01
Cs-137	2.15E+01
Np-237	1.39E-06
Pu-238	4.87E-03
Pu-239	6.46E-01
Pu-240	6.85E-02
Pu-241	1.94E-01
Pu-242	3.40E-06
Sr-90	1.21E+02
U-233	1.42E-09
U-234	1.80E-03
U-235	7.49E-05
U-236	1.89E-05
U-238	1.69E-03

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D030, D033, D034, D035, D036, D038, D039, D040, D041, D043, F001, F002, F003, F004, F005

No TRUCON Codes Provided

Waste Stream Description

Solidified aqueous waste slurry

Waste Stream ID: **RP-W013**

Appendix C

TRU Waste Inventory Profile Report

Site	Hanford (River Protection) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	RH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	PFP TRU Solids	Activity Concentrations Decayed to CY			2004		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Tank(s)	270.0	0.0	270.0
Current Form Total	270.0	0.0	270.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid - Dir Ld	410.3	0.0	410.3
Final Form Total	410.3	0.0	410.3

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	1.37
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	560.60
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	6.05E+01
Cs-137	1.95E+02
Np-237	2.21E-03
Pu-238	6.58E-01
Pu-239	1.40E+01
Pu-240	3.23E+00
Pu-241	3.25E+01
Pu-242	2.58E-04
Sr-90	4.37E+02
U-233	5.17E-03
U-234	2.62E-03
U-235	1.09E-04
U-236	6.33E-05
U-238	2.44E-03

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D030, D033, D034, D035, D036, D038, D039, D040, D041, D043, F001, F002, F003, F004, F005

No TRUCON Codes Provided

Waste Stream Description

Solidified aqueous waste slurry.

Waste Stream ID: **RP-W016**

Appendix C

TRU Waste Inventory Profile Report

Site	Hanford (River Protection) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	RH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	PUREX TRU Cladding Removal Solids			Activity Concentrations Decayed to CY	2004		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Tank(s)	2030.0	0.0	2030.0
Current Form Total	2030.0	0.0	2030.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid - Dir Ld	1277.2	0.0	1277.2
Final Form Total	1277.2	0.0	1277.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	1.37
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	560.60
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	4.69E-01
Cs-137	5.47E+01
Np-237	1.10E-05
Pu-238	9.11E-02
Pu-239	9.17E-01
Pu-240	2.58E-01
Pu-241	6.62E+00
Pu-242	3.27E-05
Sr-90	3.63E+01
U-233	1.60E-07
U-234	1.28E-02
U-235	4.91E-04
U-236	1.24E-03
U-238	8.82E-03

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D030, D033, D034, D035, D036, D038, D039, D040, D041, D043, F001, F002, F003, F004, F005

No TRUCON Codes Provided

Waste Stream Description

Solidified aqueous waste slurry

Waste Stream ID: **RP-W754**

Appendix C

TRU Waste Inventory Profile Report

Site	Hanford (River Protection) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	224 Waste	Activity Concentrations Decayed to CY			2004		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Tank(s)	1079.0	0.0	1079.0
Current Form Total	1079.0	0.0	1079.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	323.2	0.0	323.2
Final Form Total	323.2	0.0	323.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	1.60
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.20E-01
Cs-137	1.66E-01
Np-237	1.62E-06
Pu-238	1.11E-02
Pu-239	1.55E+00
Pu-240	1.29E-01
Pu-241	2.16E-01
Pu-242	4.91E-06
Sr-90	3.36E+00
U-233	1.24E-10
U-234	1.79E-04
U-235	7.25E-06
U-236	1.75E-06
U-238	1.64E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D030, D033, D034, D035, D036, D038, D039, D040, D041, D043, F001, F002, F003, F004, F005

No TRUCON Codes Provided

Waste Stream Description

Solidified aqueous waste slurry.

Waste Stream ID: **RP-W755**

Appendix C

TRU Waste Inventory Profile Report

Site	Hanford (River Protection) Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3100	Handling	CH
Source Cat.	Materials Production/Recovery Effluents	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Bismuth Phosphate Process TRU Solids			Activity Concentrations Decayed to CY	2004		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Tank(s)	3090.0	0.0	3090.0
Current Form Total	3090.0	0.0	3090.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	793.5	0.0	793.5
Final Form Total	793.5	0.0	793.5

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	1.60
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.41E-01
Cs-137	3.32E-01
Np-237	8.04E-05
Pu-238	2.97E-03
Pu-239	5.40E-01
Pu-240	4.38E-02
Pu-241	6.82E-02
Pu-242	5.51E-07
Sr-90	1.20E+01
U-233	3.11E-09
U-234	3.61E-03
U-235	1.60E-04
U-236	2.90E-05
U-238	3.67E-03

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D030, D033, D034, D035, D036, D038, D039, D040, D041, D043, F001, F002, F003, F004, F005

No TRUCON Codes Provided

Waste Stream Description

Solidified aqueous waste slurry

Waste Stream ID: SP-T001

Appendix C

TRU Waste Inventory Profile Report

Site	Separations Process Research Unit	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3120	Handling	CH
Source Cat.	R&D/R&D Laboratory Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A			Activity Concentrations Decayed to CY	N/A		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Tank(s)	8.2	0.0	8.2
Current Form Total	8.2	0.0	8.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	8.3	0.0	8.3
Final Form Total	8.3	0.0	8.3

Waste Material Parameters

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

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.32E+00
Cs-137	4.80E+01
Pu-239	1.28E+01
Sr-90	7.80E+01

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Separations Process Research Unit.

Waste Stream ID: SP-T002

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TRU Waste Inventory Profile Report

Site	Separations Process Research Unit	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	N/A			Activity Concentrations Decayed to CY	N/A		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Uncontained	41.8	0.0	41.8
Current Form Total	41.8	0.0	41.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	41.8	0.0	41.8
Final Form Total	41.8	0.0	41.8

Waste Material Parameters

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

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

Waste Stream ID: **SR-T001-773A-CLAS**

Appendix C

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Other/Multiple Sources	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	CH TRU - Sensitive waste from 773A			Activity Concentrations Decayed to CY	1990		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
Box - Steel	28.2	0.0	28.2
SWB Dir Ld w/ Liner	5.7	0.0	5.7
Current Form Total	34.3	0.0	34.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
SLB2 (5' x 5' x 8) Dir Ld	118.9	0.0	118.9
SWB Dir Ld w/o Liner	5.7	0.0	5.7
Final Form Total	124.9	0.0	124.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	129.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	32.10
Cellulosics	26.70
Rubber	0.00
Plastics	5.30
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	213.17
Packaging Material, Plastic	0.12
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

TRUCON Code(s) 125/225

Waste Stream Description

This waste stream is defense related, contact handled TRU waste and is composed of metal equipment and debris

Waste Stream ID: SR-T001-WSB-1

Appendix C

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3000	Handling	CH
Source Cat.	Source Unknown	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	UNKNOWN				Activity Concentrations Decayed to CY	2015	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	0.0	4910.2	4910.2
Current Form Total	0.0	4910.2	4910.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/ Liner	0.0	4910.2	4910.2
Final Form Total	0.0	4910.2	4910.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	2300.00
Inorganic Matrix	720.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	1.20
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.99E+02
Pu-238	6.77E-03
Pu-239	4.44E-02
Pu-240	1.69E-02
Pu-241	8.17E+00
U-234	1.32E-03
U-235	4.25E-05
U-236	6.83E-07
U-238	3.84E-07

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream is defense related, contact handled TRU and is a neutralized aqueous stream solidified in an inorganic matrix (cement).

Waste Stream ID: **SR-T001-WSB-3**

Appendix C

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3000	Handling	CH
Source Cat.	Source Unknown	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	UNKNOWN	Activity Concentrations Decayed to CY			2015		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.0	143.9	143.9
Current Form Total	0.0	143.9	143.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	0.0	143.9	143.9
Final Form Total	0.0	143.9	143.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	250.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	2.99E+02
Pu-238	6.15E-01
Pu-239	4.04E+00
Pu-240	1.48E+00
Pu-241	7.45E+00
U-234	4.51E-03
U-235	1.45E-04
U-238	1.31E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream is defense related, contact handled TRU and is a neutralized aqueous stream in an inorganic sorbent.

Waste Stream ID: SR-W026-MFFF-1

Appendix C

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	UNKNOWN	Activity Concentrations Decayed to CY			2015		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.0	3504.2	3504.2
Current Form Total	0.0	3504.2	3504.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.0	3504.2	3504.2
Final Form Total	0.0	3504.2	3504.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	3.13
Aluminum-based Metals/Alloys	0.07
Other Metals	0.04
Other Inorganic Materials	1.24
Cellulosics	2.20
Rubber	0.26
Plastics	15.30
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Pu-238	4.11E-01
Pu-239	2.69E+00
Pu-240	9.86E-01
Pu-241	4.95E+00
U-234	3.00E-06
U-235	9.66E-07
U-236	1.58E-08
U-238	8.75E-09

Haz. Waste No(s).

D008

TRUCON Code(s)

125/225

Waste Stream Description

This waste stream is defense related, contact handled TRU and is composed of heterogeneous debris which can include HEPA filters, plastic, protective clothing, metal, gloves, lead lined gloves and sludges.

Waste Stream ID: **SR-W026-PDCF-1**

Appendix C

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	UNKNOWN	Activity Concentrations Decayed to CY			2017		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.0	2146.6	2146.6
Current Form Total	0.0	2146.6	2146.6

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.0	2146.6	2146.6
Final Form Total	0.0	2146.6	2146.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	3.13
Aluminum-based Metals/Alloys	0.07
Other Metals	0.04
Other Inorganic Materials	1.24
Cellulosics	2.20
Rubber	0.26
Plastics	15.30
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

No Final Form
Radionuclides ProvidedHaz. Waste No(s).
D008TRUCON Code(s)
125/225

Waste Stream Description

This waste stream is defense related, contact handled TRU and is composed of heterogeneous debris which can include HEPA filters, plastic, protective clothing, metal ingots including beryllium, gloves, lead lined gloves and sludges.

Waste Stream ID: SR-W026-WSB-2

Appendix C

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	UNKNOWN				Activity Concentrations Decayed to CY	2015	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.0	625.9	625.9
Current Form Total	0.0	625.9	625.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	0.0	625.9	625.9
Final Form Total	0.0	625.9	625.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	3.13
Aluminum-based Metals/Alloys	0.07
Other Metals	0.04
Other Inorganic Materials	1.24
Cellulosics	2.20
Rubber	0.26
Plastics	15.30
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	37.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

Final Form Radionuclides

Isotope	Typical Concentration (Ci/m ³)
Am-241	1.32E+02
Pu-238	9.66E-06
Pu-239	1.98E-01
Pu-240	9.86E-02
Pu-241	1.98E-01
Pu-242	7.54E-06
U-234	3.00E-04
U-235	9.66E-06
U-236	1.56E-07
U-238	9.08E-08

Haz. Waste No(s).

D008

TRUCON Code(s)

125/225

Waste Stream Description

This waste stream is defense related, contact handled TRU and is composed of heterogeneous debris with can include HEPA filters, plastic, protective clothing, metal, gloves, lead lined gloves, and sludges.

Waste Stream ID: **SR-W027-221H-HET-B**

Appendix C

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Discarding Excess/Expired Materials	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Sensitive- Heterogeneous debris from 221H			Activity Concentrations Decayed to CY	2004		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	14.8	0.0	14.8
Current Form Total	14.8	0.0	14.8

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/ Liner	14.8	0.0	14.8
Final Form Total	14.8	0.0	14.8

Waste Material Parameters

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

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

TRUCON Code(s) 125/225

Waste Stream Description

This waste stream has been separated from its parent waste stream SR-W027-221H-HET because it contains sensitive waste.

Waste Stream ID: **SR-W027-HBL-Box-B**

Appendix C

TRU Waste Inventory Profile Report

Site	Savannah River Site	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Discarding Excess/Expired Materials	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Sensitive CH mixed TRU from 221H			Activity Concentrations Decayed to CY	1990		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - SRS Black Box	128.1	0.0	128.1
Current Form Total	128.1	0.0	128.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
SLB2 (5' x 5' x 8) Dir Ld	101.9	0.0	101.9
Final Form Total	101.9	0.0	101.9

Waste Material Parameters

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

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream has been separated from its parent waste stream SR-W027-HBL-Box because it contains sensitive waste.

Waste Stream ID: VN-CHT001

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TRU Waste Inventory Profile Report

Site	GE - Vallecitos Nuclear Center	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Heterogeneous debris				Activity Concentrations Decayed to CY	N/A	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Hot Cell	35.0	0.0	35.0
Current Form Total	35.0	0.0	35.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	34.9	0.0	34.9
Final Form Total	34.9	0.0	34.9

Waste Material Parameters

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

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste will be generated from refurbishment of an alpha high-level hot cell.

Waste Stream ID: VN-RHT001

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TRU Waste Inventory Profile Report

Site	GE - Vallecitos Nuclear Center	Final Waste Form	Heterogeneous	Waste Matrix Code	S5400	Handling	RH
Source Cat.	Remediation/D&D Waste	Defense Determination	Defense-Related	Inventory Date	12/31/2007		
Stream Name	Heterogeneous debris	Activity Concentrations Decayed to CY			N/A		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Hot Cell	105.0	0.0	105.0
Current Form Total	105.0	0.0	105.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	149.5	0.0	149.5
Final Form Total	149.5	0.0	149.5

Waste Material Parameters

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

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

The waste will be generated from the refurbishment of an alpha high-level hot cell.

Waste Stream ID: **WV-M008**

Appendix C

TRU Waste Inventory Profile Report

Site	West Valley Demonstration Project	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3150	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Pending Determination	Inventory Date	12/31/2007		
Stream Name	TRU Concrete from Solidification Activities			Activity Concentrations Decayed to CY	N/A		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	2370.00
Inorganic Matrix	1.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of samples solidified with cement generated from the on-site A&PC laboratory does not carry any hazardous waste codes.

Waste Stream ID: **WV-M010a**

Appendix C

TRU Waste Inventory Profile Report

Site	West Valley Demonstration Project	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3190	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Pending Determination	Inventory Date	12/31/2007		
Stream Name	TRU Spent Absorbents CH	Activity Concentrations Decayed to CY			N/A		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	1.9	0.0	1.9
Box - Misc	21.0	0.0	21.0
Current Form Total	22.9	0.0	22.9

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	1.9	0.0	1.9
SWB Dir Ld w/o Liner	22.7	0.0	22.7
Final Form Total	24.6	0.0	24.6

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	1.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	151.77
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of spent absorbents (not cement) generated from site operations. The media absorbed is not known for this waste stream. This does not contain hazardous waste.

Waste Stream ID: **WV-M010b**

Appendix C

TRU Waste Inventory Profile Report

Site	West Valley Demonstration Project	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3190	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Pending Determination	Inventory Date	12/31/2007		
Stream Name	TRU Spent Absorbents. RH Waste			Activity Concentrations Decayed to CY	N/A		

Waste Volume Detail (m³)

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

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

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	1.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	560.60
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of spent absorbents (not cement) generated from site operations. The media absorbed is not known for this waste stream. This does not contain hazardous waste

Waste Stream ID: **WV-M013**

Appendix C

TRU Waste Inventory Profile Report

Site	West Valley Demonstration Project	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Pending Determination	Inventory Date	12/31/2007		
Stream Name	Sweeping Compound	Activity Concentrations Decayed to CY				N/A	

Waste Volume Detail (m³)

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

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

Waste Material Parameters

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

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of sweeping compound generated from normal site operations. The specific contents include grid and floor debris. M013 was assumed to be hazardous and was later determined to be non-hazardous after characterization.

Waste Stream ID: **WV-T004**

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TRU Waste Inventory Profile Report

Site	West Valley Demonstration Project	Final Waste Form	Solidified Inorganics	Waste Matrix Code	S3000	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Pending Determination	Inventory Date	12/31/2007		
Stream Name	Fissile Material - Other				Activity Concentrations Decayed to CY	N/A	

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	3.7	0.0	3.7
Box - Misc	2.0	0.0	2.0
Current Form Total	5.7	0.0	5.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	5.8	0.0	5.8
Final Form Total	5.8	0.0	5.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	0.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	2370.00
Inorganic Matrix	1.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of liquid waste with associated fissile material generated from previous decontamination and decommissioning activities. The specific contents are unknown. One container from WV-T001 was identified as all liquids and was removed and placed into this waste stream.

Waste Stream ID: **WV-T006a**

Appendix C

TRU Waste Inventory Profile Report

Site	West Valley Demonstration Project	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Pending Determination	Inventory Date	12/31/2007		
Stream Name	CH TRU General Waste			Activity Concentrations Decayed to CY	N/A		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	133.1	0.0	133.1
Box - Misc	471.6	0.0	471.6
Current Form Total	604.7	0.0	604.7

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	133.1	0.0	133.1
SWB w/ 4 - 55-gal Drums w/o Liners	1071.6	0.0	1071.6
Final Form Total	1204.8	0.0	1204.8

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	1.00
Other Inorganic Materials	1.00
Cellulosics	0.00
Rubber	1.00
Plastics	1.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	202.23
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of radiologically contaminated solid waste generated from various site activities. The specific contents include but are not limited to Anti-C clothing, hoses, glovebags, tools, pre-filters, HEPA filters, Roughing filters, other filters, spent absorbents, sweeping compound, glove boxes, tools, evaporators, dissolver tanks, condensers, piping DAW, plastic bags, bottles, and cell floor debris etc. The waste that was consolidated into this waste stream had several containers that were characterized as LLW.

Waste Stream ID: **WV-T006b**

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TRU Waste Inventory Profile Report

Site	West Valley Demonstration Project	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Pending Determination	Inventory Date	12/31/2007		
Stream Name	RH TRU General Waste			Activity Concentrations Decayed to CY	N/A		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	57.6	0.0	57.6
Box - Misc	373.8	0.0	373.8
Current Form Total	431.4	0.0	431.4

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	533.1	0.0	533.1
Final Form Total	533.1	0.0	533.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	1.00
Other Inorganic Materials	1.00
Cellulosics	0.00
Rubber	1.00
Plastics	1.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of radiologically contaminated solid waste generated from various site activities. The specific contents include but are not limited to Anti-C clothing, hoses, glovebags, tools, pre-filters, HEPA filters, Roughing filters, other filters, spent absorbents, sweeping compound, glove boxes, tools, evaporators, dissolver tanks, condensers, piping DAW, plastic bags, bottles, and cell floor debris etc. The waste that was consolidated into this waste stream had several containers that were characterized as LLW.

Waste Stream ID: **WV-T017a**

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TRU Waste Inventory Profile Report

Site	West Valley Demonstration Project	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Pending Determination	Inventory Date	12/31/2007		
Stream Name	Spent Filter Media and concrete blocks			Activity Concentrations Decayed to CY	N/A		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Misc	12.2	0.0	12.2
Current Form Total	12.2	0.0	12.2

Final Form Volumes			
Container Type	Stored	Proj.	Total
SWB Dir Ld w/o Liner	13.2	0.0	13.2
Final Form Total	13.2	0.0	13.2

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	1.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	2370.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	153.50
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of spent filter media generated from filtration of the Fuel Receiving & Storage pool where the remaining spent fuel rods were stored.

Waste Stream ID: **WV-T017b**

Appendix C

TRU Waste Inventory Profile Report

Site	West Valley Demonstration Project	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	Defense Determination	Pending Determination	Inventory Date	12/31/2007		
Stream Name	Spent Filter Media with no concrete blocks			Activity Concentrations Decayed to CY	N/A		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Box - Misc	39.3	0.0	39.3
Current Form Total	39.3	0.0	39.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	56.1	0.0	56.1
Final Form Total	56.1	0.0	56.1

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	1.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of spent filter media generated from filtration of the Fuel Receiving & Storage pool where the remaining spent fuel rods were stored.

Waste Stream ID: **WV-W024a**

Appendix C

TRU Waste Inventory Profile Report

Site	West Valley Demonstration Project	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	CH
Source Cat.	Remediation/D&D Waste	Defense Determination	Pending Determination	Inventory Date	12/31/2007		
Stream Name	TRU Lead and other mixed waste			Activity Concentrations Decayed to CY	N/A		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	7.1	0.0	7.1
Box - Misc	22.0	0.0	22.0
Current Form Total	29.1	0.0	29.1

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	6.9	0.0	6.9
Final Form Total	6.9	0.0	6.9

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	11340.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	2370.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

No Final Form
Radionuclides ProvidedHaz. Waste No(s).
D006, D007, D008,
D009, F002No TRUCON
Codes Provided

Waste Stream Description

Hazardous constituents include Cadmium, Chromium, Lead, and Mercury from D&D activities and Laboratory Waste generated onsite in solid forms such as filters, vacuum cans, glove box debris, piping, hoses, pumps, anti C clothing, bags, wipes, and floor debris from D&D activities. If any liquids are found, then the liquid would be solidified and not expected to be TRU.

Waste Stream ID: **WV-W024b**

Appendix C

TRU Waste Inventory Profile Report

Site	West Valley Demonstration Project	Final Waste Form	Heterogeneous	Waste Matrix Code	S5000	Handling	RH
Source Cat.	Remediation/D&D Waste	Defense Determination	Pending Determination	Inventory Date	12/31/2007		
Stream Name	RH Waste Stream			Activity Concentrations Decayed to CY	N/A		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	12.3	0.0	12.3
Box - Misc	166.0	0.0	166.0
Current Form Total	178.3	0.0	178.3

Final Form Volumes			
Container Type	Stored	Proj.	Total
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	253.7	0.0	253.7
Final Form Total	253.7	0.0	253.7

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	11340.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	652.20
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

No Final Form
Radionuclides ProvidedHaz. Waste No(s).
D006, D007, D008,
D009No TRUCON
Codes Provided

Waste Stream Description

Hazardous constituents include Cadmium, Chromium, Lead, and Mercury from D&D activities and Laboratory Waste generated onsite in solid forms such as filters, vacuum cans, glovebox debris, piping, hoses, pumps, anti C clothing, bags, wipes, and floor debris from D&D activities. If any liquids are found, then the liquid would be solidified and not expected to be TRU..

Waste Stream ID: **WV-Z001**

Appendix C

TRU Waste Inventory Profile Report

Site	West Valley Demonstration Project	Final Waste Form	Unknown	Waste Matrix Code	U9999	Handling	CH
Source Cat.	N/A	Defense Determination	Pending Determination	Inventory Date	12/31/2007		
Stream Name	West Valley Buried TRU Waste			Activity Concentrations Decayed to CY	N/A		

Waste Volume Detail (m³)

Current Form Volumes			
Container Type	Stored	Proj.	Total
Uncontained	1353.0	0.0	1353.0
Current Form Total	1353.0	0.0	1353.0

Final Form Volumes			
Container Type	Stored	Proj.	Total
55-gal Drum Dir Ld w/o Liner	1353.0	0.0	1353.0
Final Form Total	1353.0	0.0	1353.0

Waste Material Parameters

Material Parameter	Average Density (kg/m ³)
Iron-based Metals/Alloys	0.00
Aluminum-based Metals/Alloys	0.00
Other Metals	0.00
Other Inorganic Materials	10.00
Cellulosics	0.00
Rubber	0.00
Plastics	0.00
Cements	0.00
Inorganic Matrix	0.00
Organic Matrix	0.00
Soils/gravel	0.00
Vitrified	0.00
Packaging Material, Steel	130.80
Packaging Material, Plastic	0.00
Packaging Material, Cellulosics	0.00
Packaging Material, Lead	0.00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

N/A

APPENDIX D: Inventory Comparisons

D-1 Introduction

This appendix presents transuranic (TRU) waste inventory comparisons for volumes, waste material parameters (WMPs), and radionuclide data reported in the ATWIR-2007 (DOE 2008b) and this report. The ATWIR-2007 documents the TRU waste inventory information as of December 31, 2006, and is reported as the 2006 inventory. The inventory information presented in this report is an update of the TRU waste inventory information since the 2006 inventory with new data cutoff date of December 31, 2007, and is referred to as the 2007 inventory.

Each TRU waste site has provided the WIPP with their best estimates for the volumes, physical WMPs, and radiological characteristics of the individual TRU waste streams that are stored on or projected for their site. Since the ATWIR-2007 was prepared, a number of developments have occurred that changed the volume, physical characteristics, or radiological characteristics of TRU waste streams as they were reported by the sites for the 2007 inventory. Descriptions of the decisions, data, and guidance that affect the TRU waste inventory are as follows:

- Waste program management decisions. Many sites have reassessed what their final form container type will be, resulting in changes to final form volumes.
- Availability and confidence in supplemental characterization/analytical information and/or acceptable knowledge (AK). For example, CH waste volumes reported for the Idaho Completion Project (ICP) at the Idaho National Laboratory have significantly decreased based on new AK information available on the pre-1970 buried waste.
- Site estimates of projected TRU waste stream volumes.
- Availability of more characterization data with continuing waste emplacement at the WIPP. As of December 31, 2007, 52,484 m³ of CH-TRU waste and 88 m³ of RH-TRU waste has been emplaced at the WIPP.
- Additional Site Guidance. Several sites provided their radionuclide concentrations and waste material densities based on the current form containers for the 2006 inventory. LANL-CO issued guidance to all the sites on how these calculations should be done so that the radionuclides and WMPs reflect the final form of the waste, and are consistent across the complex for the 2007 inventory data (LANL-CO 2008g).

The WIPP has been open and operating for nearly ten years. The large quantity TRU waste sites are all actively preparing acceptable knowledge (AK) and are characterizing waste for shipment to and emplacement in the WIPP. The characterization data for this emplaced waste are documented in the WIPP Waste Information System (WWIS) database (DOE 2008a). As time progresses, the data in the WWIS and data collected by the sites during waste certification are used to update the TRU waste inventory and

continue to provide a more accurate representation of the expected inventory at closure of the WIPP.

D-2 Volumetric Comparisons

The total amount of CH-TRU waste that has been emplaced since the ATWIR-2007 is 6,827 m³, with 4,300 m³ of the total emplaced TRU waste coming from INL. At the time of the data cutoff for the 2007 report (December 31, 2006), no RH-TRU waste had been shipped. As of December 31, 2007, WIPP received 88 m³ of RH-TRU waste from INL. The tables and graphs below present volume differences reported by the sites since the 2007 report, are limited to site differences and do not take into account the emplaced waste.

The largest reported CH-TRU volume change was a decrease in volume reported for pre-1970 buried TRU waste retrieved for the Idaho Completion Project (ICP). A decrease of approximately 10,500 m³ of TRU waste since the 2006 inventory was reported for both IN-ID-SDA-Debris and IN-ID-SDA-Sludge. Volumes reported for these two waste streams in the 2007 inventory consisted of estimates documented in AK report CCP-AK-INL-001 (CCP 2008), which contained the most current information about this CH-TRU waste. In the 2006 inventory, ICP reported these same CH-TRU waste streams, but the volumes were inflated because the site conservatively overestimated the amount of additional soil that would be included with the waste during the remediation process. A common theme reported in the 2007 inventory across the complex for the decrease in CH-TRU volumes is due to sites reassessing their final form container types or the number of final form containers based on repackaging efficiencies. For example, LANL reduced the final form volume of waste stream LA-TA-21-13 by reassessing the number of final form SWBs after repackaging. The final form SWB container count reduced for the 2007 reporting period with an associated volume reduction of 1,168 m³. LANL waste streams LA-TA-55-19 and LA-TA-55-30 had 1,210 SWBs transferred to waste stream LA-MND01.001. These SWBs were originally going to be repackaged into the same container configuration for their final form, but for the 2007 data submittal LANL determined that the final form containers for these SWBs would be 55-gallon drums instead of overpacking the 55-gallon drums in SWBs. LANL reassessed their final form containers and found 1,210 SWBs that accounted for a volume reduction of 1,280 m³.

Hanford had the only increase in CH-TRU waste volume other than a negligible increase in small quantity sites CH-TRU waste volumes reported in the 2007 inventory. Hanford's largest increase was in CH-TRU waste stream RLPFP-01. This is a decontamination and decommissioning (D&D) waste stream and the final form volumes will increase by an estimated 5,000 m³ after repackaging. This increase is due to the uncertainty of the number of final form containers needed to package this D&D waste.

Overall, RH-TRU waste has decreased by approximately 400 m³ since the 2006 inventory. In the 2007 inventory, the ANL-E RH-TRU volume has increased from 36 RH canisters to 490 RH canisters for a volume increase of approximately 400 m³. The

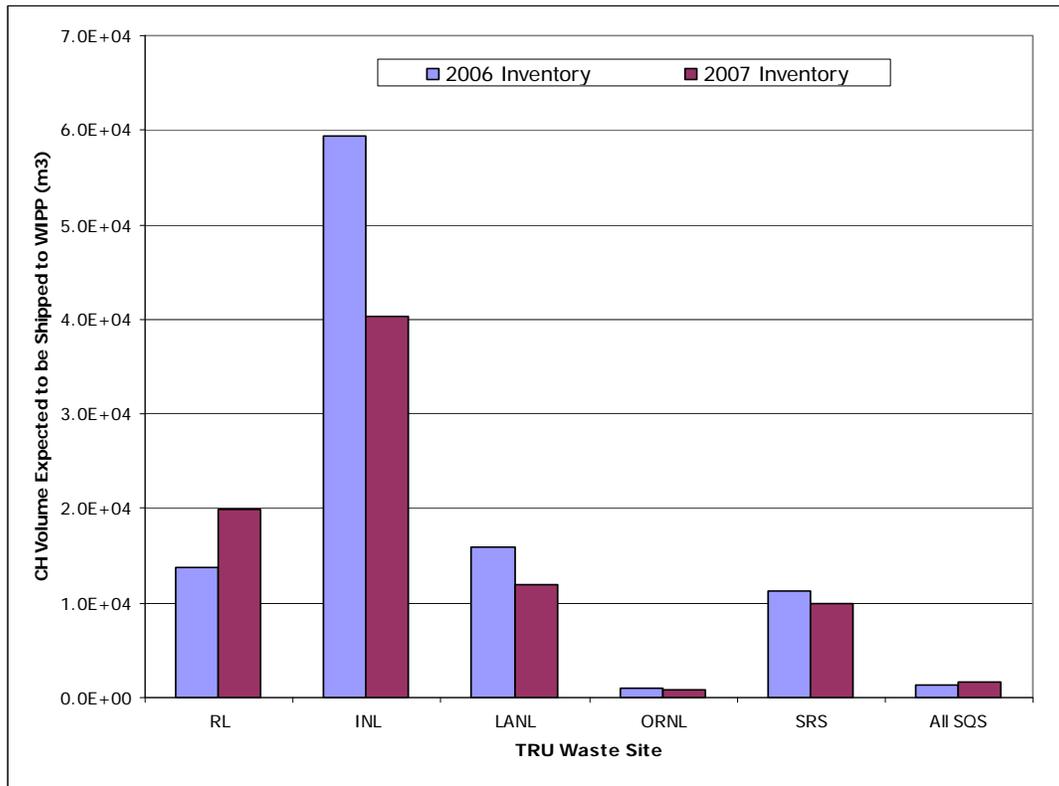
increase in the RH projected waste accounts for the D&D of a facility at ANL-E. Oak Ridge contributes to 90% of the decrease in RH-TRU waste volume for the 2007 inventory with the removal of waste stream OR-W215. This RH sludge waste stream's final waste form has been projected to be low-level waste (LLW) and the site plans to dispose of this waste at NTS.

Tables D-1 and D-2 and Figures D-1 and D-2 show the final form anticipated (stored plus projected) volumes of CH and RH-TRU waste for large quantity sites with the small quantity site volumes totaled and shown as one entry. The tables compare the 2006 inventory data volumes from the 2007 report with the 2007 inventory data volumes from this report.

Table D-1. CH-TRU Waste Expected to be Shipped to WIPP

Site	2006 Inventory (m ³)	2007 Inventory (m ³)
Hanford Richland Operations (RL)	1.4E+04	2.0E+04
Idaho National Laboratory (INL)	5.9E+04	4.0E+04
Los Alamos National Laboratory (LANL)	1.6E+04	1.2E+04
Oak Ridge National Laboratory (ORNL)	1.0E+03	8.8E+02
Savannah River Site (SRS)	1.1E+04	9.9E+03
Total of Small Quantity Sites	1.3E+03	1.7E+03
Grand Total	1.0E+05	8.5E+04

Data Source: CID Data Version D.7.00, LANL-CO 2008a

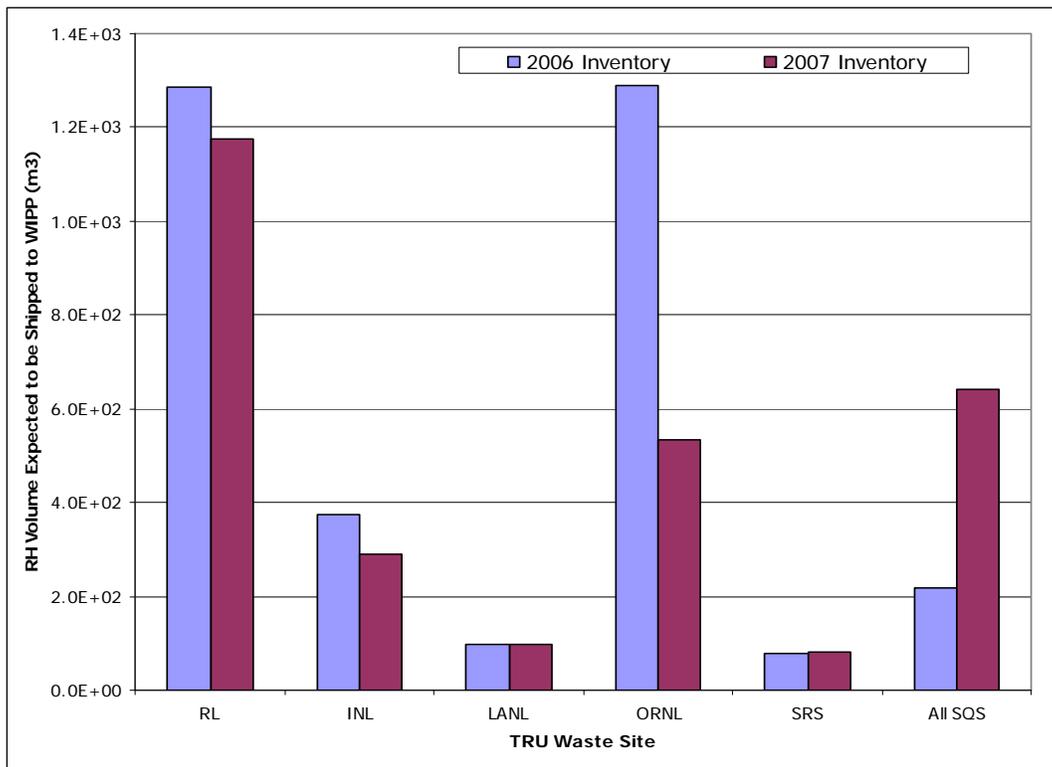
Figure D-1. CH-TRU Waste Expected to be Shipped to WIPP

Data Source: CID Data Version D.7.00, LANL-CO 2008a

Table D-2. RH-TRU Waste Expected to be Shipped to WIPP

Site	2006 Inventory (m ³)	2007 Inventory (m ³)
Hanford Richland Operations (RL)	1.3E+03	1.2E+03
Idaho National Laboratory (INL)	3.7E+02	2.9E+02
Los Alamos National Laboratory (LANL)	9.8E+01	9.8E+01
Oak Ridge National Laboratory (ORNL)	1.3E+03	5.3E+02
Savannah River Site (SRS)	7.8E+01	8.2E+01
Total of Small Quantity Sites	2.2E+02	6.4E+02
Grand Total	3.3E+03	2.8E+03

Data Source: CID Data Version D.7.00, LANL-CO 2008a

Figure D-2. RH-TRU Waste Expected to be Shipped to WIPP

Data Source: CID Data Version D.7.00, LANL-CO 2008a

D-3 Waste and Packaging Material Parameter Comparisons

The CH-TRU waste and packaging material parameters are presented in Table D-3 and graphically in Figure D-3. The most notable changes in the CH-TRU waste material parameter densities (reported in kg/m^3) are in iron-based metals, with a decrease of 99 kg/m^3 from 180 kg/m^3 reported in the 2006 inventory to 81 kg/m^3 in the 2007 inventory. The decrease in iron-based metal density can be attributed to a decrease in these metals in the IN-BN510 waste stream and the RLPFP-01 debris waste streams that have been reassessed using characterization data. This reduction in iron-based metals does not affect the minimum requirement for iron-based metal of approximately 20 million kg to maintain the reducing conditions in the repository (DOE 2004). The minimum amount of iron-based metal is met in steel containers in the repository alone. Other notable changes in CH-TRU waste material densities include decreases in plastic density by 44 kg/m^3 (from reassessment of the IN-BN510 waste stream), in cellulosic density by 33 kg/m^3 (from reassessment of IN-BN510 and IN-ID-RF-5300-A waste streams), and in cement density by 51 kg/m^3 (due to AK information incorporated in the estimate for the IN-BNINW216 waste stream at INL).

There was essentially no change in the packaging material parameters associated with CH-TRU waste reported in the 2007 inventory as compared to the packaging materials reported in the 2006 inventory.

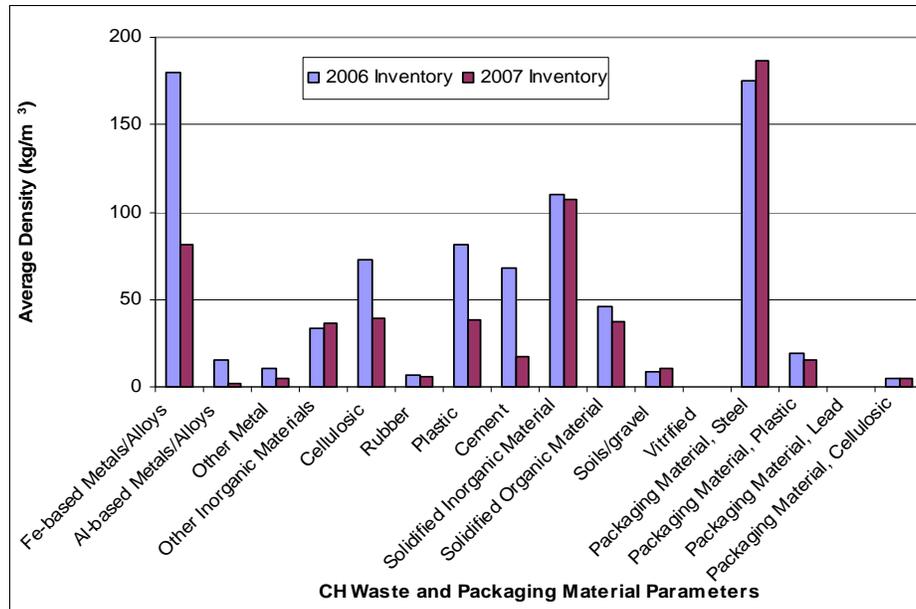
The RH-TRU waste and packaging material parameters are presented in Table D-4 and graphically in Figure D-4. The most notable changes in the RH-TRU waste material parameter densities (reported in kg/m^3) are in solidified inorganic material, where there is a decrease of 480 kg/m^3 from 590 kg/m^3 reported in the 2006 inventory to 110 kg/m^3 in the 2007 inventory. The decrease in solidified inorganic material can be attributed to a decrease in sludge from the K-basins from Hanford and associated analysis of materials coming from the K-basins as reported in waste stream RL105-09. Other notable changes in RH-TRU waste material densities include decreases in soils and gravel density by 52 kg/m^3 (from reassessment of the waste going into the RL300-08 waste stream at Hanford), and in iron based metal density by 20 kg/m^3 (due to incorporation of characterization data from the IN-AE-AGHC-01 waste stream that was being shipped to INL in 2007 and use of new AK information in the IN-AW-161 waste stream at INL).

There was also an increase of 20 kg/m^3 in steel packaging materials associated with RH-TRU waste that can be attributed to reassessment of packaging configuration and the use of 55-gallon drums overpacked in RH canisters.

Table D-3. CH-TRU Average Densities for Waste and Packaging Materials

CH Waste Material Parameter	2006 Inventory (kg/m^3)	2007 Inventory (kg/m^3)
Fe-based Metals/Alloys	1.8E+02	8.1E+01
Al-based Metals/Alloys	1.5E+01	1.5E+00
Other Metal	1.1E+01	5.1E+00
Other Inorganic Materials	3.4E+01	3.6E+01
Cellulosic	7.3E+01	4.0E+01
Rubber	6.6E+00	5.6E+00
Plastic	8.2E+01	3.8E+01
Cement	6.8E+01	1.7E+01
Solidified Inorganic Material	1.1E+02	1.1E+02
Solidified Organic Material	4.6E+01	3.8E+01
Soils/gravel	9.1E+00	1.1E+01
Vitrified	0.0E+00	0.0E+00
Packaging Material, Steel	1.8E+02	1.9E+02
Packaging Material, Plastic	1.9E+01	1.6E+01
Packaging Material, Lead	0.0E+00	0.0E+00
Packaging Material, Cellulosic	4.7E+00	5.1E+00

Data Source: CID Data Version D.7.00, LANL-CO 2008a

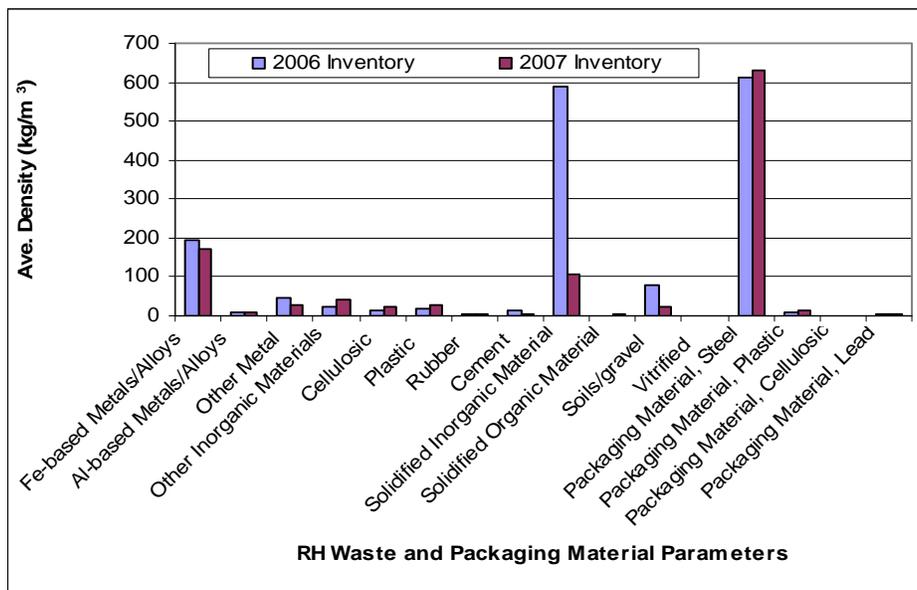
Figure D-3. CH-TRU Average Densities for Waste and Packaging Materials

Data Source: CID Data Version D.7.00, LANL-CO 2008a

Table D-4. RH-TRU Average Densities for Waste and Packaging Materials

RH Waste Material Parameter	2006 Inventory (kg/m ³)	2007 Inventory (kg/m ³)
Fe-based Metals/Alloys	1.9E+02	1.7E+02
Al-based Metals/Alloys	1.0E+01	1.0E+01
Other Metal	4.5E+01	2.8E+01
Other Inorganic Materials	2.3E+01	4.0E+01
Cellulosic	1.4E+01	2.2E+01
Plastic	1.8E+01	2.8E+01
Rubber	4.7E+00	6.6E+00
Cement	1.2E+01	4.1E+00
Solidified Inorganic Material	5.9E+02	1.1E+02
Solidified Organic Material	7.1E-01	3.4E+00
Soils/gravel	7.7E+01	2.5E+01
Vitrified	7.2E-02	0.0E+00
Packaging Material, Steel	6.1E+02	6.3E+02
Packaging Material, Plastic	1.1E+01	1.4E+01
Packaging Material, Cellulosic	0.0E+00	0.0E+00
Packaging Material, Lead	5.4E+00	3.5E+00

Data Source: CID Data Version D.7.00, LANL-CO 2008a

Figure D-4. RH-TRU Average Densities for Waste and Packaging Materials

Data Source: CID Data Version D.7.00, LANL-CO 2008a

D-4 Radionuclide Activity Comparisons

Total activities decay corrected to WIPP site closure for the large quantity TRU waste sites are presented in Tables D-5 and D-6. The activity reported in these tables (in curies (Ci)) includes emplaced, stored and projected activity for each large quantity site for the 2006 and the 2007 inventory. The sum of the activity from the small quantity sites is also included as a separate entry in each of these tables. Additional characterization data has been used by the sites for this report that was not available at the time data were collected for the ATWIR-2007 (DOE 2008b). In addition to new characterization data being available, there has been a total of approximately 994,000 Ci of CH-TRU waste and approximately 680 Ci of RH-TRU waste emplaced in WIPP as of December 31, 2007.

The total activity of waste distributed throughout the DOE complex is approximately 1,231,000 Ci. This waste is anticipated to be generated at 12 small quantity TRU waste sites and five large quantity TRU waste sites included in Table D-5 and Figure D-5 for the 2007 inventory. The waste reported by the sites is either retrievably stored or will be generated in future projects identified by these sites. In addition to this anticipated waste activity, emplaced waste activity is also included in the total presented in Table D-5 and Figure D-5. The total activity of CH-TRU waste reported throughout the DOE complex in ATWIR-2007 (not including emplaced waste) was approximately 1,647,000 Ci. Therefore, the activity reported by the TRU waste sites has decreased by approximately 416,000 Ci since the ATWIR-2007. A description of this decrease is provided below.

The emplaced and anticipated CH-TRU waste activity at LANL is reported in Table D-5. LANL shipped CH-TRU waste with a total radionuclide activity of approximately 55,900 Ci. LANL also reported a decrease in the total activity of their CH-TRU waste of approximately 29,900 Ci compared to the activity reported in ATWIR-2007. The decrease in activity reported by LANL is associated with reassignment of containers to CCP waste streams. In this process, LANL reassessed the final form containers that require repackaging for shipment to WIPP. As a result of this reassessment, the final form volume of TRU waste expected to be shipped to WIPP has decreased and this is reflected in an associated decrease in activity in the waste streams identified in section D-2 of this report (see Appendix E of this report for a breakdown of reassignments for these waste streams).

The emplaced and anticipated CH-TRU waste activity for Hanford RL is reported in Table D-5. Hanford RL shipped CH-TRU waste with a total radionuclide activity of approximately 10,000 Ci. Hanford RL also reported an increase in the total activity of their CH-TRU waste of approximately 238,000 Ci compared to the activity reported in ATWIR - 2007. The increase in CH-TRU waste activity reported by Hanford RL can be attributed to development of new Acceptable Knowledge (AK) information and incorporation of that information into the TRU waste inventory estimates provided by the site. The largest increases were observed for RL308-01, RLPURX-01, RL325-01 and RLPFP-01, all with new AK reported. The total activity of waste stream RL216Z-02 increased by 13,000 Ci and this can be attributed to incorporation of analytical data into the inventory estimate for 2007.

The emplaced and anticipated CH-TRU waste activity for SRS is reported in Table D-5. SRS shipped CH-TRU waste with a total radionuclide activity of approximately 32,300 Ci. SRS also reported a decrease in the total activity of their CH-TRU waste of approximately 459,000 Ci compared to the activity reported in ATWIR-2007. The largest changes were observed in the SR-W027-221H-HET-A waste stream that was reassigned to waste stream SR-W027-221H-HET. This decrease was attributed to a miscalculation based on grams rather than activity (LANL-CO 2008h). The waste streams that were affected by this calculation error include: W026-772F-HET, W027-221H-HET, W027-773A-HET, and W027-SRSG-HET. Three other CH-TRU waste streams have observable decreases in total activity. These waste streams are: SR-W027-999-MD-HET, SR-W027-221F-HET, and SR-W027-235F-HET. The activity decrease in these waste streams can be attributed to recalculation of radionuclides based on the final form volumes of the waste streams. The recalculation was done based on the guidance sent to the TRU waste sites from the TRU waste inventory team for use in data collection this year (LANL-CO 2008g).

The emplaced and anticipated CH-TRU waste activity for INL is reported in Table D-5. INL shipped CH-TRU waste with a total radionuclide activity of approximately 16,000 Ci. INL also reported a decrease in the total activity of their CH-TRU waste of approximately 109,000 Ci compared to the activity reported in ATWIR-2007. This reduction in activity can be attributed to volume reduction in two Idaho Closure Project waste streams, IN-ID-SDA-Debris and IN-ID-SDA-Sludge, based on additional knowledge gained on these waste streams as they were excavated. In addition to this volume reduction, the activity of the largest waste stream currently being processed through the AMWTP has decreased by approximately 30,000 Ci due to reassignment of some of the waste reported in 2006 to other waste streams (for a detailed explanation of these waste stream reassignments, see Appendix E).

The anticipated CH-TRU waste activity for Oak Ridge is reported in Table D-5. Oak Ridge did not ship CH-TRU waste to WIPP in 2007 and the CH-TRU waste from Oak Ridge has been assigned to new waste streams from those originally reported in TWBIR Rev. 2 (DOE 1995b). These new waste stream assignments track with the AK assignments that were provided for the waste that is being characterized and certified for shipment to WIPP from the site (LANL-CO 2008i).

Three small quantity sites reported observable changes in CH-TRU radionuclide activity in 2008. These sites are: the Material Fuels Complex (MFC) (formerly Argonne West), LLNL, and NTS. The radionuclide activity concentrations reported by MFC and NTS were reassessed using available analytical data and LLNL radionuclide estimates changed as a result of implementing the TRU waste team calculation guidance (LANL-CO 2008g).

The radionuclide activity for RH-TRU waste distributed throughout the DOE complex at five small quantity TRU waste sites and five large quantity TRU waste sites is approximately 210,400 Ci, as shown in Table D-6 and Figure D-6. This waste is either

retrievably stored or will be generated in future projects identified by these sites. The radionuclide activity for RH-TRU waste reported in the ATWIR-2007 was 1,538,000 Ci. This total activity has decreased by approximately 1,330,000 Ci in this report.

No RH-TRU waste was shipped by Hanford RL to WIPP in 2007. Hanford-RL reported a decrease in total activity of approximately 1,073,000 Ci in their 2007 RH-TRU inventory. The decrease in RH-TRU waste activity reported by Hanford-RL can be attributed to redistribution of waste from three waste streams (RL324-08, RL327-07 and RL324-07) into a single waste stream (RL300-08) and incorporation of the RL325-07 waste stream into RL325-08. In addition to redistribution, analytical data are now available and have been incorporated into the inventory estimate for waste streams RL105-09, RLSWO-08, and RLPURX-07. The radionuclide activity concentrations have been recalculated for RLWTP-08.

The emplaced and anticipated RH-TRU waste activity for INL is reported in Table D-6. INL shipped RH-TRU waste with radionuclide activity of approximately 683 Ci to WIPP. INL reported a decrease in total activity of approximately 4,200 Ci in their 2007 RH-TRU inventory. This reduction in activity can be attributed to waste shipments from the IN-AE-AGHC-01 waste stream as well as reassignment of containers between waste streams (for more details see Appendix E).

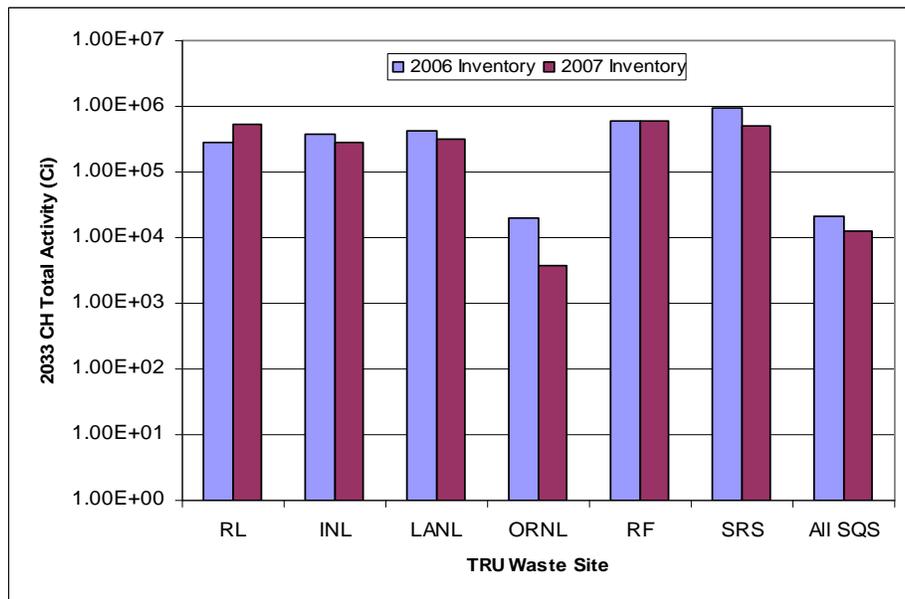
The anticipated RH-TRU waste activity for Oak Ridge is reported in Table D-6. Oak Ridge did not ship RH-TRU waste to WIPP in 2007, and all of the RH-TRU waste from Oak Ridge has been assigned to new waste streams from those originally reported in TWBIR Rev. 2 (DOE 1995b). These new waste stream assignments track with the AK assignments that were being provided for the waste that is being characterized and certified for shipment to WIPP from the site (LANL-CO 2008i).

Two small quantity sites reported observable RH-TRU radionuclide activity increases in 2007. Waste streams at MFC and ANL-E have been reassessed. New analytical data was used at MFC resulting in an increase in activity of 11,000 Ci in two waste streams, AW-T031.3122 and AW-W046. There was also an increase of 352 Ci in the AE-T009 waste stream at ANL-E.

Table D-5. CH-TRU Radionuclide Activity by Site

Site	2006 Inventory (Ci)	2007 Inventory (Ci)
Hanford Richland Operations (RL)	2.83E+05	5.32E+05
Idaho National Laboratory (INL)	3.73E+05	2.80E+05
Los Alamos National Laboratory (LANL)	4.29E+05	3.13E+05
Oak Ridge National Laboratory (ORNL)	2.01E+04	3.85E+03
Rocky Flats Environmental Technology Site (RFETS)	5.80E+05	5.80E+05
Savannah River Site (SRS)	9.62E+05	5.03E+05
Total of Small Quantity Sites	2.12E+04	1.27E+04
Grand Total	2.67E+06	2.22E+06

Data Source: CID Data Version D.7.00, LANL-CO 2008a

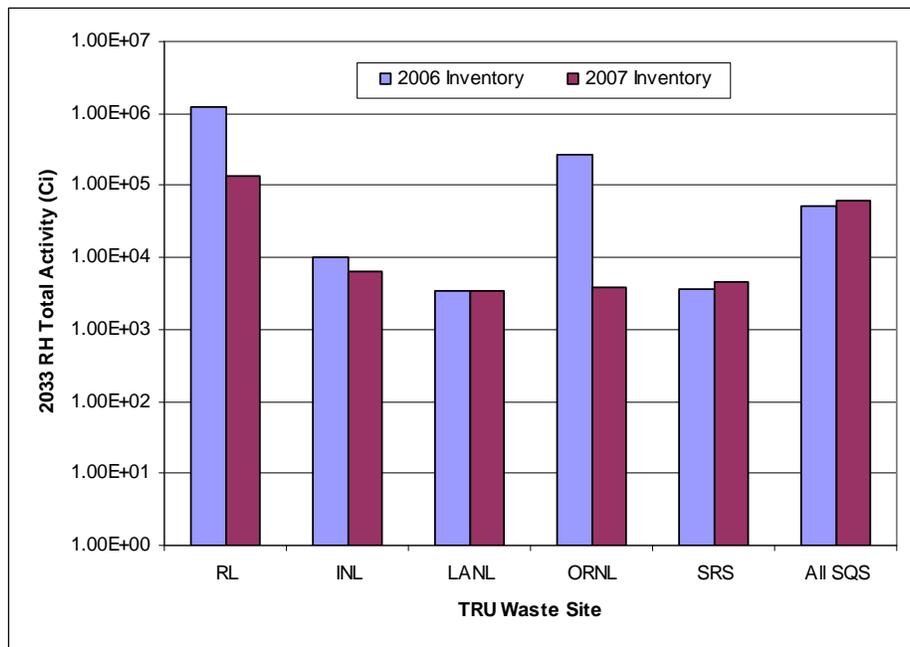
Figure D-5. CH-TRU Radionuclide Activity by Site

Data Source: CID Data Version D.7.00, LANL-CO 2008a

Table D-6. RH-TRU Radionuclide Activity by Site

Site	2006 Inventory (Ci)	2007 Inventory (Ci)
Hanford Richland Operations (RL)	1.21E+06	1.32E+05
Idaho National Laboratory (INL)	1.01E+04	6.56E+03
Los Alamos National Laboratory (LANL)	3.41E+03	3.41E+03
Oak Ridge National Laboratory (ORNL)	2.65E+05	3.87E+03
Savannah River Site (SRS)	3.66E+03	4.56E+03
Total of Small Quantity Sites	5.12E+04	6.02E+04
Grand Total	1.54E+06	2.11E+05

Data Source: CID Data Version D.7.00, LANL-CO 2008a

Figure D-6. RH-TRU Radionuclide Activity by Site

Data Source: CID Data Version D.7.00, LANL-CO 2008a

APPENDIX E: Historic Crosswalk of Inventory Waste Streams

This Appendix contains a crosswalk that maps current 2007 inventory waste streams to the 2006 inventory waste streams, published in the ATWIR-2007 (DOE 2008b).

Rocky Flats Environmental Technology Site (RFETS) has shipped all of its transuranic (TRU) waste to the Waste Isolation Pilot Plant (WIPP) and is considered a closed site. RFETS TRU waste streams are contained in the WIPP Waste Information System (WWIS) and can be found in Appendix B of this document. Since RFETS TRU waste is emplaced, there is no crosswalk of RFETS waste streams in this Appendix.

Battelle Columbus Laboratories (BCL) has shipped all of its TRU waste either to Hanford Richland Operations Office (RL) or the Savannah River Site (SRS); therefore, BCL is considered a closed site. Hanford-RL and SRS inventories include the waste that they received from BCL. The crosswalk of BCL waste streams is therefore no longer presented in this Appendix.

Table E-1 displays the site code in the first column, the 2007 waste stream in the middle column, and the last column shows all the 2006 waste streams that are mapped to a specific 2007 waste stream. This table provides easy reference to the 2006 waste streams using the 2007 waste streams as a lookup guide. Table E-2 shows the inverse of Table E-1. Table E-2 displays the site code in the first column, the 2006 waste stream in the middle column, and the last column shows all the 2007 waste streams that are mapped to a specific 2006 waste stream. This table provides reference to 2007 waste streams when the 2006 waste streams are known.

Site Code and Site Name:

AE	Argonne National Laboratory
AW	Material and Fuels Complex (MFC)
BL	Babcock and Wilcox Nuclear Energy Services
BT	Bettis Atomic Power Laboratory
FR	Framatome
IN	Idaho National Laboratory
KA	Knolls Atomic Power Laboratory
KN	Knolls Atomic Power Laboratory-Nuclear Fuels Services
LA	Los Alamos National Laboratory
LB	Lawrence Berkeley Laboratory
LL	Lawrence Livermore National Laboratory
MC	U.S. Army Materiel Command
ND	Nuclear Radiation Development Site, Inc
NT	Nevada Test Site
OR	Oak Ridge National Laboratory
PA	Paducah Gaseous Diffusion Plant
RL	Hanford Site (Richland Operations Office)
RP	Hanford Site (Office of River Protection)
SA	Sandia National Laboratories
SP	Separations Process Research Unit
SR	Savannah River Site
VN	General Electric Vallecitos Nuclear Center
WV	West Valley Demonstration Project

Table E-1. Crosswalk of 2007 to 2006 Waste Streams

Site Code	2007 Waste Stream	2006 Waste Stream(s)
AE	AE-T001	AE-T001
AE	AE-T003	AE-T003
AE	AE-T009	AE-T009
AW	AW-IN-TRA-BE-01	AW-IN-TRA-BE-01
AW	AW-N026.82	AW-N026.82
AW	AW-N027.531	AW-N027.531
AW	AW-T031.1322	AW-T031.1322
AW	AW-T033.1325	AW-T033.1325
AW	AW-W018	AW-W018
AW	AW-W019	AW-W019
AW	AW-W020.13	AW-W020.13
AW	AW-W026	AW-W026
AW	AW-W028	AW-W028
AW	AW-W029	AW-W029
AW	AW-W046	AW-W046
AW	AW-W047	AW-W047
AW	AW-W048	AW-W048
AW	AW-W049	AW-W049
BL	BL-Parks	<i>New waste stream</i>
BL	BL-Parks-A	<i>New waste stream</i>
BT	BT-T001	BT-T001
BT	BT-T002	BT-T002
BT	BT-T006	BT-T006
BT	BT-T007	BT-T007
FR	FR-MOX-MT02	FR-MOX-MT02
FR	FR-MOX-T01	FR-MOX-T01
IN	IN-AE-AGHC-01	IN-AE-AGHC-01
IN	IN-AW-161	IN-AW-161
IN	IN-BN004	IN-BN004
IN	IN-BN161	IN-BN161
IN	IN-BN211	IN-BN211
IN	IN-BN222	IN-W222.116
IN	IN-BN243	IN-BN-243
IN	IN-BN252	IN-BN252
IN	IN-BN296	IN-BN296
IN	IN-BN304	IN-BN304
IN	IN-BN311	IN-BN-510, IN-W348.1012
IN	IN-BN409	IN-BN-510
IN	IN-BN421	IN-W361.1021, IN-W362.1020, IN-W363.1019
IN	IN-BN432	IN-BN-510
IN	IN-BN510	IN-BN-510, IN-W267.1005, IN-W366.841
IN	IN-BN835	IN-BN835

Table E-1. Crosswalk of 2007 to 2006 Waste Streams
Continued

Site Code	2007 Waste Stream	2006 Waste Stream(s)
IN	IN-BN836	IN-BN836
IN	IN-BNINW216	IN-BNINW216
IN	IN-BNINW218	IN-BNINW218
IN	IN-GEM-01	IN-GEM-01
IN	IN-GEM-02	IN-GEM-02
IN	IN-ID-BTO-030	<i>New waste stream</i>
IN	IN-ID-INL-152	<i>New waste stream</i>
IN	IN-ID-RF-S3114	IN-ID-RF-S3114
IN	IN-ID-RF-S3150-A	IN-ID-RF-S3150-A, IN-W167.149
IN	IN-ID-RF-S5100-A	IN-ID-RF-S5100-A
IN	IN-ID-RF-S5126-A	IN-ID-RF-S5126-A
IN	IN-ID-RF-S5300-A	IN-ID-RF-S5300-A
IN	IN-ID-RTC-S5000	IN-ID-RTC-S5000
IN	IN-ID-SDA-Debris	IN-ID-SDA-Debris
IN	IN-ID-SDA-Sludge	IN-ID-SDA-Sludge
IN	IN-ID-SDA-Soil	IN-ID-SDA-Soil
IN	IN-INTEC-SFS-01	IN-INTEC-SFS-01
IN	IN-NRF-153	IN-NRF-153
IN	IN-NRF-SPC	<i>New waste stream</i>
IN	IN-SBW-01A	IN-SBW-01A
IN	IN-SBW-01B	IN-SBW-01B
IN	IN-TRA-150	IN-TRA-150
IN	IN-TRA-157	IN-TRA-157
IN	IN-W146.699	IN-W146.699
IN	IN-W159.1072	IN-W159.1072
IN	IN-W163.1007	IN-W163.1007
IN	IN-W169.193	IN-ID-RF-S5300-A
IN	IN-W181.162	IN-W181.162
IN	IN-W188.160	IN-W188.160
IN	IN-W197.197	IN-ID-RF-S5300-A
IN	IN-W198.204	IN-ID-RF-S5300-A
IN	IN-W208.243	IN-W208.243
IN	IN-W216.876	IN-W216.876
IN	IN-W216.877	IN-W216.877
IN	IN-W219.110	IN-W219.110
IN	IN-W219.914	IN-W219.914
IN	IN-W228.884	IN-W228.884
IN	IN-W228.885	IN-W228.885
IN	IN-W228.886	IN-W228.886
IN	IN-W243.276	IN-W243.276
IN	IN-W243.277	IN-W243.277
IN	IN-W245.1035	IN-BN-510
IN	IN-W247.524	IN-BN-510
IN	IN-W252.282	IN-W252.282
IN	IN-W254.1045	IN-W254.1045

Table E-1. Crosswalk of 2007 to 2006 Waste Streams
Continued

Site Code	2007 Waste Stream	2006 Waste Stream(s)
IN	IN-W259.552	IN-BN-510
IN	IN-W259.920	IN-BN-510
IN	IN-W260.566	IN-BN-510
IN	IN-W263.520	IN-W263.520
IN	IN-W283.964	IN-BN-510
IN	IN-W294.343	IN-W294.343
IN	IN-W296.330	IN-W296.330
IN	IN-W296.331	IN-W296.331
IN	IN-W298.318	IN-W298.318
IN	IN-W315.601	IN-W315.601
IN	IN-W317.1029	IN-BN-510
IN	IN-W319.584	IN-W319.584
IN	IN-W321.1023	IN-W321.1023
IN	IN-W322.851	IN-W322.851
IN	IN-W322.952	IN-W322.952
IN	IN-W323.562	IN-W323.562
IN	IN-W323.951	IN-W323.951
IN	IN-W332.661	IN-W332.661
IN	IN-W337.673	IN-W337.673
IN	IN-W337.957	IN-W337.957
IN	IN-W341.671	IN-W341.671
IN	IN-W341.954	IN-W341.954
IN	IN-W342.652	IN-W342.652
IN	IN-W342.953	IN-W342.953
IN	IN-W347.818	IN-W347.818
IN	IN-W350.650	IN-W350.650
IN	IN-W350.923	IN-W350.923
IN	IN-W353.859	IN-W353.859
IN	IN-W353.917	IN-W353.917
IN	IN-W357.1022	IN-W357.1022
IN	IN-W358.854	IN-W358.854
IN	IN-W358.855	IN-W358.855
IN	IN-W358.948	IN-W358.948
IN	IN-W358.949	IN-W358.949
IN	IN-W359.853	IN-W359.853
IN	IN-W360.852	IN-W360.852
IN	IN-W360.912	IN-W360.912
IN	IN-W364.845	IN-W364.1011
IN	IN-W365.843	IN-W365.1010
IN	IN-W372.832	IN-W372.832
IN	IN-W372.918	IN-W372.918
IN	IN-W375.1096	IN-W375.1096
KA	KA-T001	KA-T001
KA	KA-W016	KA-W016
KN	KN-B234TRU	KN-B234TRU

Table E-1. Crosswalk of 2007 to 2006 Waste Streams
Continued

Site Code	2007 Waste Stream	2006 Waste Stream(s)
LA	LA-CIN01.001	LA-TA-55-14, LA-TA-55-35, LA-TA-55-36, LA-TA-55-37, LA-TA-55-38, LA-TA-55-40, LA-TA-55-41
LA	LA-CIN02.001	LA-TA-50-17, LA-TA-50-18, LA-TA-50-19, LA-TA-55-30
LA	LA-LA238HOR	LA-LA238HOR
LA	LA-LAMHD03DD	<i>New waste stream</i>
LA	LA-LAMIN02V.001	LA-LAMIN02V
LA	LA-LAMIN04S	LA-LAMIN04S
LA	LA-LA-NCD01	LA-LA-NCD01
LA	LA-LANHD01	LA-LANHD01
LA	LA-LANHD02238	LA-LANHD02238
LA	LA-LANIN03NC	LA-LANIN03NC
LA	LA-MHD01.001	LA-LAMHD01, LA-LAMHD02238, LA-LAMHD03, LA-LA-NCD01, LA-LANHD01, LA-LANHD02238, LA-MHD02238, LA-TA-00-01, LA-TA-00-02, LA-TA-03-13, LA-TA-50-12, LA-TA-54-01, LA-TA-55-01, LA-TA-55-02, LA-TA-55-03, LA-TA-55-04, LA-TA-55-05, LA-TA-55-06, LA-TA-55-07, LA-TA-55-08, LA-TA-55-09, LA-TA-55-10, LA-TA-55-11, LA-TA-55-12, LA-TA-55-15, LA-TA-55-18, LA-TA-55-19, LA-TA-55-20, LA-TA-55-21, LA-TA-55-22, LA-TA-55-23, LA-TA-55-24, LA-TA-55-25, LA-TA-55-26, LA-TA-55-28, LA-TA-55-29, LA-TA-55-30, LA-TA-55-31, LA-TA-55-32, LA-TA-55-42, LA-TA-55-43, LA-TA-55-44, LA-TA-55-54, LA-TA-55-56, LA-TA-55-62
LA	LA-MHD03.001	LA-LAMHD01, LA-LAMHD03, LA-TA-00-01, LA-TA-03-03, LA-TA-03-04, LA-TA-03-05, LA-TA-03-06, LA-TA-03-07, LA-TA-03-08, LA-TA-03-09, LA-TA-03-10, LA-TA-03-12, LA-TA-03-13, LA-TA-03-14, LA-TA-03-15, LA-TA-03-16, LA-TA-03-17, LA-TA-03-18, LA-TA-03-19, LA-TA-03-20, LA-TA-03-21, LA-TA-03-23, LA-TA-03-24, LA-TA-03-25, LA-TA-03-26, LA-TA-03-32, LA-TA-50-11
LA	LA-MHD04.001	LA-TA-21-06, LA-TA-21-07, LA-TA-21-08, LA-TA-21-09
LA	LA-MIN03-NC.001	LA-LAMIN03NC, LA-TA-50-10, LA-TA-50-18, LA-TA-50-19
LA	LA-OS-00-01.001	LA-OS-00-01
LA	LA-OS-00-03	LA-OS-00-03
LA	LA-PX-00-01	LA-PX-00-01
LA	LA-TA-00-01	LA-TA-00-01
LA	LA-TA-00-03	LA-TA-00-03
LA	LA-TA-03-01	LA-TA-03-01
LA	LA-TA-03-09	LA-TA-03-09
LA	LA-TA-03-10	LA-TA-03-10
LA	LA-TA-03-12	LA-TA-03-12
LA	LA-TA-03-14	LA-TA-03-14
LA	LA-TA-03-17	LA-TA-03-17
LA	LA-TA-03-20	LA-TA-03-20
LA	LA-TA-03-21	LA-TA-03-21
LA	LA-TA-03-23	LA-TA-03-23

Table E-1. Crosswalk of 2007 to 2006 Waste Streams
Continued

Site Code	2007 Waste Stream	2006 Waste Stream(s)
LA	LA-TA-03-27	LA-TA-03-27
LA	LA-TA-03-28	LA-TA-03-28
LA	LA-TA-03-29	LA-TA-03-29
LA	LA-TA-03-30	LA-TA-03-30
LA	LA-TA-03-31	LA-TA-03-31
LA	LA-TA-03-33	LA-TA-03-33
LA	LA-TA-03-34	LA-TA-03-34
LA	LA-TA-03-40	LA-TA-03-40
LA	LA-TA-03-42	LA-TA-03-42
LA	LA-TA-21-05	LA-TA-21-05
LA	LA-TA-21-06	LA-TA-21-06
LA	LA-TA-21-07	LA-TA-21-07
LA	LA-TA-21-08	LA-TA-21-08
LA	LA-TA-21-09	LA-TA-21-09
LA	LA-TA-21-10	LA-TA-21-10
LA	LA-TA-21-11	LA-TA-21-11
LA	LA-TA-21-12	LA-TA-21-12
LA	LA-TA-21-13	LA-TA-21-13
LA	LA-TA-21-14	LA-TA-21-14
LA	LA-TA-21-15	LA-TA-21-15
LA	LA-TA-21-16	LA-TA-21-16
LA	LA-TA-21-17	LA-TA-21-17
LA	LA-TA-21-18	LA-TA-21-18
LA	LA-TA-21-40	LA-TA-21-40
LA	LA-TA-21-41	LA-TA-21-41
LA	LA-TA-21-42	LA-TA-21-42
LA	LA-TA-48-01	LA-TA-48-01
LA	LA-TA-50-01	LA-TA-50-01
LA	LA-TA-50-02	LA-TA-50-02
LA	LA-TA-50-05	LA-TA-50-05
LA	LA-TA-50-06	LA-TA-50-06
LA	LA-TA-50-10	LA-TA-50-10
LA	LA-TA-50-11	LA-TA-50-11
LA	LA-TA-50-12	LA-TA-50-12
LA	LA-TA-50-13	LA-TA-50-13
LA	LA-TA-50-14	LA-TA-50-14
LA	LA-TA-50-15	LA-TA-50-15
LA	LA-TA-50-16	LA-TA-50-16
LA	LA-TA-50-18	LA-TA-50-18
LA	LA-TA-50-19	LA-TA-50-19
LA	LA-TA-50-20	LA-TA-50-20
LA	LA-TA-50-40	LA-TA-50-40
LA	LA-TA-50-41	LA-TA-50-41
LA	LA-TA-55-03	LA-TA-55-03
LA	LA-TA-55-04	LA-TA-55-04

Table E-1. Crosswalk of 2007 to 2006 Waste Streams
Continued

Site Code	2007 Waste Stream	2006 Waste Stream(s)
LA	LA-TA-55-05	LA-TA-55-05
LA	LA-TA-55-07	LA-TA-55-07
LA	LA-TA-55-08	LA-TA-55-08
LA	LA-TA-55-09	LA-TA-55-09
LA	LA-TA-55-10	LA-TA-55-10
LA	LA-TA-55-12	LA-TA-55-12
LA	LA-TA-55-14	LA-TA-55-14
LA	LA-TA-55-15	LA-TA-55-15
LA	LA-TA-55-17B	LA-TA-55-17B
LA	LA-TA-55-18	LA-TA-55-18
LA	LA-TA-55-19	LA-TA-55-19
LA	LA-TA-55-20	LA-TA-55-20
LA	LA-TA-55-21	LA-TA-55-21
LA	LA-TA-55-22	LA-TA-55-22
LA	LA-TA-55-23	LA-TA-55-23
LA	LA-TA-55-24	LA-TA-55-24
LA	LA-TA-55-25	LA-TA-55-25
LA	LA-TA-55-26	LA-TA-55-26
LA	LA-TA-55-27	LA-TA-55-27
LA	LA-TA-55-29	LA-TA-55-29
LA	LA-TA-55-30	LA-TA-55-30
LA	LA-TA-55-31	LA-TA-55-31
LA	LA-TA-55-32	LA-TA-55-32
LA	LA-TA-55-33	LA-TA-55-33
LA	LA-TA-55-34	LA-TA-55-34
LA	LA-TA-55-36	LA-TA-55-36
LA	LA-TA-55-38	LA-TA-55-38
LA	LA-TA-55-39	LA-TA-55-39
LA	LA-TA-55-43	LA-TA-55-43
LA	LA-TA-55-46	LA-TA-55-46
LA	LA-TA-55-47	LA-TA-55-47
LA	LA-TA-55-50	LA-TA-55-50
LA	LA-TA-55-52	LA-TA-55-52
LA	LA-TA-55-53	LA-TA-55-53
LA	LA-TA-55-54	LA-TA-55-54
LA	LA-TA-55-60	LA-TA-55-60
LA	LA-TA-55-61	LA-TA-55-61
LA	LA-TA-55-62	LA-TA-55-62
LA	LA-TA-55-63	LA-TA-55-63
LB	LB-T001	LB-T001
LB	LB-T002	LB-T002
LB	LB-T003	LB-T002
LB	LB-T004	LB-T001
LL	LL-M001	LL-M001, LL-T001
LL	LL-T004	LL-T004

Table E-1. Crosswalk of 2007 to 2006 Waste Streams
Continued

Site Code	2007 Waste Stream	2006 Waste Stream(s)
LL	LL-T005	<i>New waste stream</i>
LL	LL-W018a	LL-T003, LL-W018a
LL	LL-W018b	LL-W018b
LL	LL-W019	LL-W019
MC	MC-W001	MC-W001
MC	MC-W002	MC-W002
ND	ND-T001	<i>New waste stream</i>
NT	NT-JAS-01	NT-JAS-01
NT	NT-W001	NT-W001
NT	NT-W002	NT-W001
NT	NT-W003	NT-W001
NT	NT-W004	NT-W001
NT	NT-W005	NT-W001
NT	NT-W021	NT-W021
OR	OR-CHEM-CH-HET	OR-W201, OR-W202
OR	OR-GENR-CH-HET	OR-W201, OR-W202
OR	OR-ISTP-CH-HET	OR-W201, OR-W202, OR-W204
OR	OR-NBL-CH-HET	OR-W202
OR	OR-NFS-CH-HET	OR-W201, OR-W205
OR	OR-NFS-CH-HOM	OR-W201, OR-W202, OR-W205
OR	OR-NFS-CH-SOIL	OR-W201, OR-W205
OR	OR-PGDP-CH-HET	OR-W202
OR	OR-RADP-CH-HET	OR-W201, OR-W202
OR	OR-REDC-CH-HET	OR-W201, OR-W202
OR	OR-REDC-RH-HET	OR-W211, OR-W212
OR	OR-RF-CH-HET	OR-W201, OR-W202, OR-W204
OR	OR-RF-CH-HOM	OR-W204
OR	OR-TBD-CH-HET	OR-W201, OR-W202
OR	OR-TBD-RH-HET	OR-W211, OR-W212, OR-W214
OR	OR-W203	OR-W203
OR	OR-W213-CH-HET	OR-W213
OR	OR-W213-RH-HET	OR-W213
OR	OR-W233	<i>New waste stream</i>
OR	OR-WSTR-CH-HET	OR-W202
OR	OR-Y12-CH-HET	OR-W202
PA	PA-A015	PA-A015
PA	PA-W014	PA-W014
RL	RL105-01	RL105-01
RL	RL105-03	RL105-03
RL	RL105-07	RL105-07
RL	RL105-09	RL105-09
RL	RL105-09A	RL105-09A
RL	RL200-01	RL200-01
RL	RL200-02	RL200-01
RL	RL201-01	RL201-01

Table E-1. Crosswalk of 2007 to 2006 Waste Streams
Continued

Site Code	2007 Waste Stream	2006 Waste Stream(s)
RL	RL202S-01	RL202S-01
RL	RL209E-01	RL209E-01
RL	RL209E-08	RL209E-01
RL	RL216Z-02	RL216Z-02
RL	RL221T-01	RL221T-01
RL	RL221U-01	RL221T-01
RL	RL222S-01	RL222S-01
RL	RL222S-08	RL222S-01
RL	RL231Z-01	RL231Z-01
RL	RL231Z-03	RL231Z-03
RL	RL233S-01	RL233S-01
RL	RL233S-03	RL233S-01
RL	RL2718-01	RL2718-01
RL	RL300-01	RL300-01, RL324-01, RL327-01
RL	RL300-03	RL300-01
RL	RL300-08	RL300-01, RL324-07, RL324-08, RL327-07
RL	RL308-01	RL308-01
RL	RL325-01	RL325-01, RL325-05
RL	RL325-03	RL325-03
RL	RL325-08	RL325-07, RL325-08
RL	RL325-09	RL325-01
RL	RL618-01	RL618-01
RL	RL618-07	RL618-07
RL	RLARG-01	RLARG-01
RL	RLBART-01	RLBART-01
RL	RLBART-08	RLBART-01
RL	RLBAT-01	RLBAT-01
RL	RLBAT-08	RLBAT-08
RL	RLBET-01	RLBET-01
RL	RLBW-01	RLBW-01
RL	RLBW-03	RLBW-01
RL	RLBW-08	RLBW-01
RL	RLCFF-01	RLCFF-01
RL	RLCFF-03	RLCFF-03
RL	RLCH2-01	<i>New waste stream</i>
RL	RLCH2-08	RLCH2-08
RL	RLESG-01	RLESG-01
RL	RLESG-08	RLESG-01
RL	RLEXX-01	RLEXX-01
RL	RLGEV-01	RLGEV-01
RL	RLGEV-08	RLGEV-01
RL	RLHAN-01	<i>New waste stream</i>
RL	RLIAEA-01	RLIAEA-01
RL	RLMLB-01	RLMLB-01
RL	RLMLL-01	RLMLL-01

Table E-1. Crosswalk of 2007 to 2006 Waste Streams
Continued

Site Code	2007 Waste Stream	2006 Waste Stream(s)
RL	RLPFP-01	RLPFP-01
RL	RLPFP-03	RLPFP-03
RL	RLPFP-04	RLPFP-04
RL	RLPFP-08	RLPFP-01
RL	RLPRC-01	RLPRC-01
RL	RLPURX-01	RLPURX-01
RL	RLPURX-07	RLPURX-07
RL	RLRFET-01	RLRFET-01
RL	RLSWO-01	RLSWO-01
RL	RLSWO-08	RLSWO-08
RL	RLWAR-01	RLWAR-01
RL	RLWAR-03	RLWAR-01
RL	RLWTP-08	RLWTP-08
RP	RP-TFC001	RP-TFC001
RP	RP-TFC002	RP-TFC002
RP	RP-TFC003	RP-TFC003
RP	RP-W013	RP-W013
RP	RP-W016	RP-W016
RP	RP-W754	RP-W754
RP	RP-W755	RP-W755
SA	SA-T001	SA-T001
SA	SA-W134	SA-W134
SA	SA-W134M	SA-W134M
SA	SA-W135	SA-W135
SA	SA-W136	SA-W136
SP	SP-T001	SP-T001
SP	SP-T002	SP-T001
SR	SR-BCLCH-MT01	SR-BCLCH-MT01
SR	SR-BCLRH-MT01	SR-BCLRH-MT01
SR	SR-BCLRH-T001	SR-BCLRH-T001
SR	SR-BCLRH-T002	SR-BCLRH-T002
SR	SR-BCLRH-T003	SR-BCLRH-T003
SR	SR-BCLRH-T004	SR-BCLRH-T004
SR	SR-BCLRH-T005	SR-BCLRH-T005
SR	SR-BCLRH-T006	SR-BCLRH-T006
SR	SR-BCLRH-T007	SR-BCLRH-T007
SR	SR-BCLRH-T008	SR-BCLRH-T008
SR	SR-BCLRH-T009	SR-BCLRH-T009
SR	SR-BCLRH-T010	SR-BCLRH-T010
SR	SR-BCLRH-T011	SR-BCLRH-T011
SR	SR-SWMF-HET-A	SR-W027-SRSG-HET
SR	SR-SWMF-HET-RH	SR-W027-SRSG-HET-RH
SR	SR-SWMF-SOIL	SR-W027-SRSG-SOIL
SR	SR-T001-221H-HEPA	SR-T001-221H-HEPA
SR	SR-T001-773A-CLAS	SR-T001-773A-CLAS

Table E-1. Crosswalk of 2007 to 2006 Waste Streams
Continued

Site Code	2007 Waste Stream	2006 Waste Stream(s)
SR	SR-T001-WSB-1	SR-T001-WSB-1
SR	SR-T001-WSB-3	SR-T001-WSB-3
SR	SR-T003-773A-HET	SR-T003-773A-HET
SR	SR-W026-221F-HEPA	SR-W026-221F-HEPA
SR	SR-W026-221F-HET	SR-W026-221F-HET
SR	SR-W026-221F-HOM	SR-W026-221F-HOM
SR	SR-W026-772F-HET	SR-W026-772F-HET
SR	SR-W026-MFFF-1	SR-W026-MFFF-1
SR	SR-W026-PDCF-1	SR-W026-PDCF-1
SR	SR-W026-WSB-2	SR-W026-WSB-2
SR	SR-W027-221F-HET	SR-W027-221F-HET
SR	SR-W027-221F-HOM	SR-W027-221F-HET
SR	SR-W027-221H-HEPA	SR-W027-221H-HEPA
SR	SR-W027-221H-HET	SR-W027-221H-HET-A
SR	SR-W027-221H-HET-B	SR-W027-221H-HET-B
SR	SR-W027-221H-HET-RH	SR-W027-221H-HET-A
SR	SR-W027-221H-HOM	SR-W027-221H-HET-A
SR	SR-W027-235F-HET	SR-W027-235F-HET
SR	SR-W027-235F-HOMO	SR-W027-235F-HOMO
SR	SR-W027-773A-HET	SR-W027-773A-HET
SR	SR-W027-999-AGNS-HET	SR-W027-999-AGNS-HET
SR	SR-W027-999-AGNS-HOM	SR-W027-999-AGNS-HOM
SR	SR-W027-999-LASL-HET	SR-W027-999-LASL-HET
SR	SR-W027-999-LASL-HOM	SR-W027-999-LASL-HOM
SR	SR-W027-999-MD-HET	SR-W027-999-MD-HET
SR	SR-W027-999-MD-HOM-A	SR-W027-999-MD-HOM-A
SR	SR-W027-999-MD-HOM-B	SR-W027-999-MD-HOM-B
SR	SR-W027-999-MD-HOM-C	SR-W027-999-MD-HOM-C
SR	SR-W027-999-MD-SOIL	SR-W027-999-MD-SOIL
SR	SR-W027-HBL-Box-A	SR-W027-HBL-Box-A
SR	SR-W027-HBL-Box-B	SR-W027-HBL-Box-B
SR	SR-W027-SRSG-HET	SR-W027-SRSG-HET
SR	SR-W027-SRSG-HET-RH	SR-W027-SRSG-HET-RH
SR	SR-W027-SRSG-HOM	SR-W027-SRSG-HOM
VN	VN-CHT001	VN-CHT001
VN	VN-RHT001	VN-RHT001
WV	WV-M008	WV-M008
WV	WV-M010a	WV-M010
WV	WV-M010b	WV-M010
WV	WV-M013	WV-M013
WV	WV-T004	WV-T001, WV-T004
WV	WV-T006a	WV-M005, WV-M007, WV-T001, WV-T006, WV-T009, WV-T011, WV-T014, WV-T018a, WV-T018b, WV-T019, WV-T020, WV-T021

Table E-1. Crosswalk of 2007 to 2006 Waste Streams
Continued

Site Code	2007 Waste Stream	2006 Waste Stream(s)
WV	WV-T006b	WV-M005, WV-M007, WV-T001, WV-T006, WV-T009, WV-T011, WV-T014, WV-T018a, WV-T018b, WV-T019, WV-T020, WV-T021
WV	WV-T017a	WV-T017
WV	WV-T017b	WV-T017
WV	WV-W024a	WV-M005, WV-M015, WV-T001, WV-T009, WV-T016, WV-W024
WV	WV-W024b	WV-M005, WV-M015, WV-T001, WV-T009, WV-T016, WV-W024
WV	WV-Z001	WV-Z001

Data Source: CID Data Version D.7.00, LANL-CO 2008a

Table E-2. Crosswalk of 2006 to 2007 Waste Streams

Site Code	2006 Waste Stream	2007 Waste Stream(s)
AE	AE-T001	AE-T001
AE	AE-T003	AE-T003
AE	AE-T009	AE-T009
AW	AW-IN-TRA-BE-01	AW-IN-TRA-BE-01
AW	AW-N026.82	AW-N026.82
AW	AW-N027.531	AW-N027.531
AW	AW-T031.1322	AW-T031.1322
AW	AW-T033.1325	AW-T033.1325
AW	AW-W018	AW-W018
AW	AW-W019	AW-W019
AW	AW-W020.13	AW-W020.13
AW	AW-W026	AW-W026
AW	AW-W028	AW-W028
AW	AW-W029	AW-W029
AW	AW-W046	AW-W046
AW	AW-W047	AW-W047
AW	AW-W048	AW-W048
AW	AW-W049	AW-W049
BT	BT-T001	BT-T001
BT	BT-T002	BT-T002
BT	BT-T006	BT-T006
BT	BT-T007	BT-T007
FR	FR-MOX-MT02	FR-MOX-MT02
FR	FR-MOX-T01	FR-MOX-T01
IN	IN-AE-AGHC-01	IN-AE-AGHC-01
IN	IN-AW-161	IN-AW-161
IN	IN-BN004	IN-BN004
IN	IN-BN161	IN-BN161
IN	IN-BN211	IN-BN211

Table E-2. Crosswalk of 2006 to 2007 Waste Streams
Continued

Site Code	2006 Waste Stream	2007 Waste Stream(s)
IN	IN-BN-243	IN-BN243
IN	IN-BN252	IN-BN252
IN	IN-BN296	IN-BN296
IN	IN-BN304	IN-BN304
IN	IN-BN-510	IN-BN311, IN-BN409, IN-BN432, IN-BN510, IN-W245.1035, IN-W247.524, IN-W259.552, IN-W259.920, IN-W260.566, IN-W283.964, IN-W317.1029
IN	IN-BN835	IN-BN835
IN	IN-BN836	IN-BN836
IN	IN-BNINW216	IN-BNINW216
IN	IN-BNINW218	IN-BNINW218
IN	IN-GEM-01	IN-GEM-01
IN	IN-GEM-02	IN-GEM-02
IN	IN-ID-RF-S3114	IN-ID-RF-S3114
IN	IN-ID-RF-S3150-A	IN-ID-RF-S3150-A
IN	IN-ID-RF-S5100-A	IN-ID-RF-S5100-A
IN	IN-ID-RF-S5126-A	IN-ID-RF-S5126-A
IN	IN-ID-RF-S5300-A	IN-ID-RF-S5300-A, IN-W169.193, IN-W197.197, IN-W198.204
IN	IN-ID-RTC-S5000	IN-ID-RTC-S5000
IN	IN-ID-SDA-Debris	IN-ID-SDA-Debris
IN	IN-ID-SDA-Sludge	IN-ID-SDA-Sludge
IN	IN-ID-SDA-Soil	IN-ID-SDA-Soil
IN	IN-INTEC-SFS-01	IN-INTEC-SFS-01
IN	IN-NRF-153	IN-NRF-153
IN	IN-SBW-01A	IN-SBW-01A
IN	IN-SBW-01B	IN-SBW-01B
IN	IN-TRA-150	IN-TRA-150
IN	IN-TRA-157	IN-TRA-157
IN	IN-W146.699	IN-W146.699
IN	IN-W159.1072	IN-W159.1072
IN	IN-W163.1007	IN-W163.1007
IN	IN-W167.149	IN-ID-RF-S3150-A
IN	IN-W181.162	IN-W181.162
IN	IN-W188.160	IN-W188.160
IN	IN-W208.243	IN-W208.243
IN	IN-W216.876	IN-W216.876
IN	IN-W216.877	IN-W216.877
IN	IN-W219.110	IN-W219.110
IN	IN-W219.914	IN-W219.914
IN	IN-W222.116	IN-BN222
IN	IN-W228.884	IN-W228.884
IN	IN-W228.885	IN-W228.885
IN	IN-W228.886	IN-W228.886
IN	IN-W243.276	IN-W243.276
IN	IN-W243.277	IN-W243.277

Table E-2. Crosswalk of 2006 to 2007 Waste Streams
Continued

Site Code	2006 Waste Stream	2007 Waste Stream(s)
IN	IN-W252.282	IN-W252.282
IN	IN-W254.1045	IN-W254.1045
IN	IN-W263.520	IN-W263.520
IN	IN-W267.1005	IN-BN510
IN	IN-W294.343	IN-W294.343
IN	IN-W296.330	IN-W296.330
IN	IN-W296.331	IN-W296.331
IN	IN-W298.318	IN-W298.318
IN	IN-W315.601	IN-W315.601
IN	IN-W319.584	IN-W319.584
IN	IN-W321.1023	IN-W321.1023
IN	IN-W322.851	IN-W322.851
IN	IN-W322.952	IN-W322.952
IN	IN-W323.562	IN-W323.562
IN	IN-W323.951	IN-W323.951
IN	IN-W325.1076	<i>Waste stream reassigned to IN-BN510</i>
IN	IN-W325.679	<i>Waste stream reassigned to IN-BN510</i>
IN	IN-W332.661	IN-W332.661
IN	IN-W337.673	IN-W337.673
IN	IN-W337.957	IN-W337.957
IN	IN-W341.671	IN-W341.671
IN	IN-W341.954	IN-W341.954
IN	IN-W342.652	IN-W342.652
IN	IN-W342.953	IN-W342.953
IN	IN-W347.818	IN-W347.818
IN	IN-W348.1012	IN-BN311
IN	IN-W350.650	IN-W350.650
IN	IN-W350.923	IN-W350.923
IN	IN-W353.859	IN-W353.859
IN	IN-W353.917	IN-W353.917
IN	IN-W357.1022	IN-W357.1022
IN	IN-W358.854	IN-W358.854
IN	IN-W358.855	IN-W358.855
IN	IN-W358.948	IN-W358.948
IN	IN-W358.949	IN-W358.949
IN	IN-W359.853	IN-W359.853
IN	IN-W360.852	IN-W360.852
IN	IN-W360.912	IN-W360.912
IN	IN-W361.1021	IN-BN421
IN	IN-W362.1020	IN-BN421
IN	IN-W363.1019	IN-BN421
IN	IN-W364.1011	IN-W364.845
IN	IN-W365.1010	IN-W365.843
IN	IN-W366.841	IN-BN510
IN	IN-W372.832	IN-W372.832
IN	IN-W372.918	IN-W372.918

Table E-2. Crosswalk of 2006 to 2007 Waste Streams
Continued

Site Code	2006 Waste Stream	2007 Waste Stream(s)
IN	IN-W375.1096	IN-W375.1096
KA	KA-T001	KA-T001
KA	KA-W016	KA-W016
KN	KN-B234PCBTRU	<i>Waste stream removed. All of the PCB waste was previously shipped from the site.</i>
KN	KN-B234TRU	KN-B234TRU
LA	LA-LA238HOR	LA-LA238HOR
LA	LA-LAMHD01	LA-MHD01.001, LA-MHD03.001
LA	LA-LAMHD02238	LA-MHD01.001
LA	LA-LAMHD03	LA-MHD01.001, LA-MHD03.001
LA	LA-LAMIN02V	LA-LAMIN02V.001
LA	LA-LAMIN03NC	LA-MIN03-NC.001
LA	LA-LAMIN04S	LA-LAMIN04S
LA	LA-LA-NCD01	LA-LA-NCD01, LA-MHD01.001
LA	LA-LANHD01	LA-LANHD01, LA-MHD01.001
LA	LA-LANHD02238	LA-LANHD02238, LA-MHD01.001
LA	LA-LANIN03NC	LA-LANIN03NC
LA	LA-MHD02238	LA-MHD01.001
LA	LA-OS-00-01	LA-OS-00-01.001
LA	LA-OS-00-03	LA-OS-00-03
LA	LA-PX-00-01	LA-PX-00-01
LA	LA-TA-00-01	LA-MHD01.001, LA-MHD03.001, LA-TA-00-01
LA	LA-TA-00-02	LA-MHD01.001
LA	LA-TA-00-03	LA-TA-00-03
LA	LA-TA-03-01	LA-TA-03-01
LA	LA-TA-03-03	LA-MHD03.001
LA	LA-TA-03-04	LA-MHD03.001
LA	LA-TA-03-05	LA-MHD03.001
LA	LA-TA-03-06	LA-MHD03.001
LA	LA-TA-03-07	LA-MHD03.001
LA	LA-TA-03-08	LA-MHD03.001
LA	LA-TA-03-09	LA-MHD03.001, LA-TA-03-09
LA	LA-TA-03-10	LA-MHD03.001, LA-TA-03-10
LA	LA-TA-03-12	LA-MHD03.001, LA-TA-03-12
LA	LA-TA-03-13	LA-MHD01.001, LA-MHD03.001
LA	LA-TA-03-14	LA-MHD03.001, LA-TA-03-14
LA	LA-TA-03-15	LA-MHD03.001
LA	LA-TA-03-16	LA-MHD03.001
LA	LA-TA-03-17	LA-MHD03.001, LA-TA-03-17
LA	LA-TA-03-18	LA-MHD03.001
LA	LA-TA-03-19	LA-MHD03.001
LA	LA-TA-03-20	LA-MHD03.001, LA-TA-03-20
LA	LA-TA-03-21	LA-MHD03.001, LA-TA-03-21
LA	LA-TA-03-23	LA-MHD03.001, LA-TA-03-23
LA	LA-TA-03-24	LA-MHD03.001
LA	LA-TA-03-25	LA-MHD03.001

Table E-2. Crosswalk of 2006 to 2007 Waste Streams
Continued

Site Code	2006 Waste Stream	2007 Waste Stream(s)
LA	LA-TA-03-26	LA-MHD03.001
LA	LA-TA-03-27	LA-TA-03-27
LA	LA-TA-03-28	LA-TA-03-28
LA	LA-TA-03-29	LA-TA-03-29
LA	LA-TA-03-30	LA-TA-03-30
LA	LA-TA-03-31	LA-TA-03-31
LA	LA-TA-03-32	LA-MHD03.001
LA	LA-TA-03-33	LA-TA-03-33
LA	LA-TA-03-34	LA-TA-03-34
LA	LA-TA-03-40	LA-TA-03-40
LA	LA-TA-03-42	LA-TA-03-42
LA	LA-TA-21-05	LA-TA-21-05
LA	LA-TA-21-06	LA-MHD04.001, LA-TA-21-06
LA	LA-TA-21-07	LA-MHD04.001, LA-TA-21-07
LA	LA-TA-21-08	LA-MHD04.001, LA-TA-21-08
LA	LA-TA-21-09	LA-MHD04.001, LA-TA-21-09
LA	LA-TA-21-10	LA-TA-21-10
LA	LA-TA-21-11	LA-TA-21-11
LA	LA-TA-21-12	LA-TA-21-12
LA	LA-TA-21-13	LA-TA-21-13
LA	LA-TA-21-14	LA-TA-21-14
LA	LA-TA-21-15	LA-TA-21-15
LA	LA-TA-21-16	LA-TA-21-16
LA	LA-TA-21-17	LA-TA-21-17
LA	LA-TA-21-18	LA-TA-21-18
LA	LA-TA-21-40	LA-TA-21-40
LA	LA-TA-21-41	LA-TA-21-41
LA	LA-TA-21-42	LA-TA-21-42
LA	LA-TA-48-01	LA-TA-48-01
LA	LA-TA-50-01	LA-TA-50-01
LA	LA-TA-50-02	LA-TA-50-02
LA	LA-TA-50-05	LA-TA-50-05
LA	LA-TA-50-06	LA-TA-50-06
LA	LA-TA-50-10	LA-MIN03-NC.001, LA-TA-50-10
LA	LA-TA-50-11	LA-MHD03.001, LA-TA-50-11
LA	LA-TA-50-12	LA-MHD01.001, LA-TA-50-12
LA	LA-TA-50-13	LA-TA-50-13
LA	LA-TA-50-14	LA-TA-50-14
LA	LA-TA-50-15	LA-TA-50-15
LA	LA-TA-50-16	LA-TA-50-16
LA	LA-TA-50-17	LA-CIN02.001
LA	LA-TA-50-18	LA-CIN02.001, LA-MIN03-NC.001, LA-TA-50-18
LA	LA-TA-50-19	LA-CIN02.001, LA-MIN03-NC.001, LA-TA-50-19
LA	LA-TA-50-20	LA-TA-50-20
LA	LA-TA-50-40	LA-TA-50-40

Table E-2. Crosswalk of 2006 to 2007 Waste Streams
Continued

Site Code	2006 Waste Stream	2007 Waste Stream(s)
LA	LA-TA-50-41	LA-TA-50-41
LA	LA-TA-54-01	LA-MHD01.001
LA	LA-TA-55-01	LA-MHD01.001
LA	LA-TA-55-02	LA-MHD01.001
LA	LA-TA-55-03	LA-MHD01.001, LA-TA-55-03
LA	LA-TA-55-04	LA-MHD01.001, LA-TA-55-04
LA	LA-TA-55-05	LA-MHD01.001, LA-TA-55-05
LA	LA-TA-55-06	LA-MHD01.001
LA	LA-TA-55-07	LA-MHD01.001, LA-TA-55-07
LA	LA-TA-55-08	LA-MHD01.001, LA-TA-55-08
LA	LA-TA-55-09	LA-MHD01.001, LA-TA-55-09
LA	LA-TA-55-10	LA-MHD01.001, LA-TA-55-10
LA	LA-TA-55-11	LA-MHD01.001
LA	LA-TA-55-12	LA-MHD01.001, LA-TA-55-12
LA	LA-TA-55-14	LA-CIN01.001, LA-TA-55-14
LA	LA-TA-55-15	LA-MHD01.001, LA-TA-55-15
LA	LA-TA-55-17B	LA-TA-55-17B
LA	LA-TA-55-18	LA-MHD01.001, LA-TA-55-18
LA	LA-TA-55-19	LA-MHD01.001, LA-TA-55-19
LA	LA-TA-55-20	LA-MHD01.001, LA-TA-55-20
LA	LA-TA-55-21	LA-MHD01.001, LA-TA-55-21
LA	LA-TA-55-22	LA-MHD01.001, LA-TA-55-22
LA	LA-TA-55-23	LA-MHD01.001, LA-TA-55-23
LA	LA-TA-55-24	LA-MHD01.001, LA-TA-55-24
LA	LA-TA-55-25	LA-MHD01.001, LA-TA-55-25
LA	LA-TA-55-26	LA-MHD01.001, LA-TA-55-26
LA	LA-TA-55-27	LA-TA-55-27
LA	LA-TA-55-28	LA-MHD01.001
LA	LA-TA-55-29	LA-MHD01.001, LA-TA-55-29
LA	LA-TA-55-30	LA-CIN02.001, LA-MHD01.001, LA-TA-55-30
LA	LA-TA-55-31	LA-MHD01.001, LA-TA-55-31
LA	LA-TA-55-32	LA-MHD01.001, LA-TA-55-32
LA	LA-TA-55-33	LA-TA-55-33
LA	LA-TA-55-34	LA-TA-55-34
LA	LA-TA-55-35	LA-CIN01.001
LA	LA-TA-55-36	LA-CIN01.001, LA-TA-55-36
LA	LA-TA-55-37	LA-CIN01.001
LA	LA-TA-55-38	LA-CIN01.001, LA-TA-55-38
LA	LA-TA-55-39	LA-TA-55-39
LA	LA-TA-55-40	LA-CIN01.001
LA	LA-TA-55-41	LA-CIN01.001
LA	LA-TA-55-42	LA-MHD01.001
LA	LA-TA-55-43	LA-MHD01.001, LA-TA-55-43
LA	LA-TA-55-44	LA-MHD01.001
LA	LA-TA-55-46	LA-TA-55-46

Table E-2. Crosswalk of 2006 to 2007 Waste Streams
Continued

Site Code	2006 Waste Stream	2007 Waste Stream(s)
LA	LA-TA-55-47	LA-TA-55-47
LA	LA-TA-55-50	LA-TA-55-50
LA	LA-TA-55-52	LA-TA-55-52
LA	LA-TA-55-53	LA-TA-55-53
LA	LA-TA-55-54	LA-MHD01.001, LA-TA-55-54
LA	LA-TA-55-56	LA-MHD01.001
LA	LA-TA-55-60	LA-TA-55-60
LA	LA-TA-55-61	LA-TA-55-61
LA	LA-TA-55-62	LA-MHD01.001, LA-TA-55-62
LA	LA-TA-55-63	LA-TA-55-63
LB	LB-T001	LB-T001, LB-T004
LB	LB-T002	LB-T002, LB-T003
LL	LL-M001	LL-M001
LL	LL-T001	LL-M001
LL	LL-T003	LL-W018a
LL	LL-T004	LL-T004
LL	LL-W018a	LL-W018a
LL	LL-W018b	LL-W018b
LL	LL-W019	LL-W019
MC	MC-W001	MC-W001
MC	MC-W002	MC-W002
NT	NT-JAS-01	NT-JAS-01
NT	NT-W001	NT-W001, NT-W002, NT-W003, NT-W004, NT-W005
NT	NT-W021	NT-W021
OR	OR-W201	OR-CHEM-CH-HET, OR-GENR-CH-HET, OR-ISTP-CH-HET, OR-NFS-CH-HET, OR-NFS-CH-HOM, OR-NFS-CH-SOIL, OR-RADP-CH-HET, OR-REDC-CH-HET, OR-RF-CH-HET, OR-TBD-CH-HET
OR	OR-W202	OR-CHEM-CH-HET, OR-GENR-CH-HET, OR-ISTP-CH-HET, OR-NBL-CH-HET, OR-NFS-CH-HOM, OR-PGDP-CH-HET, OR-RADP-CH-HET, OR-REDC-CH-HET, OR-RF-CH-HET, OR-TBD-CH-HET, OR-WSTR-CH-HET, OR-Y12-CH-HET
OR	OR-W203	OR-W203
OR	OR-W204	OR-ISTP-CH-HET, OR-RF-CH-HET, OR-RF-CH-HOM
OR	OR-W205	OR-NFS-CH-HET, OR-NFS-CH-HOM, OR-NFS-CH-SOIL
OR	OR-W211	OR-REDC-RH-HET, OR-TBD-RH-HET
OR	OR-W212	OR-REDC-RH-HET, OR-TBD-RH-HET
OR	OR-W213	OR-W213-CH-HET, OR-W213-RH-HET
OR	OR-W214	OR-TBD-RH-HET
OR	OR-W215	<i>Waste stream removed. The sludge final waste form is projected to be LLW and planned to be disposed of at NTS.</i>
PA	PA-A015	PA-A015
PA	PA-W014	PA-W014
RL	RL105-01	RL105-01
RL	RL105-03	RL105-03

Table E-2. Crosswalk of 2006 to 2007 Waste Streams
Continued

Site Code	2006 Waste Stream	2007 Waste Stream(s)
RL	RL105-07	RL105-07
RL	RL105-09	RL105-09
RL	RL105-09A	RL105-09A
RL	RL200-01	RL200-01, RL200-02
RL	RL201-01	RL201-01
RL	RL202S-01	RL202S-01
RL	RL209E-01	RL209E-01, RL209E-08
RL	RL216Z-02	RL216Z-02
RL	RL221T-01	RL221T-01, RL221U-01
RL	RL222S-01	RL222S-01, RL222S-08
RL	RL231Z-01	RL231Z-01
RL	RL231Z-03	RL231Z-03
RL	RL233S-01	RL233S-01, RL233S-03
RL	RL2718-01	RL2718-01
RL	RL300-01	RL300-01, RL300-03, RL300-08
RL	RL308-01	RL308-01
RL	RL324-01	RL300-01
RL	RL324-07	RL300-08
RL	RL324-08	RL300-08
RL	RL325-01	RL325-01, RL325-09
RL	RL325-03	RL325-03
RL	RL325-05	RL325-01
RL	RL325-07	RL325-08
RL	RL325-08	RL325-08
RL	RL327-01	RL300-01
RL	RL327-07	RL300-08
RL	RL618-01	RL618-01
RL	RL618-07	RL618-07
RL	RLARG-01	RLARG-01
RL	RLBART-01	RLBART-01, RLBART-08
RL	RLBAT-01	RLBAT-01
RL	RLBAT-08	RLBAT-08
RL	RLBET-01	RLBET-01
RL	RLBW-01	RLBW-01, RLBW-03, RLBW-08
RL	RLCFF-01	RLCFF-01
RL	RLCFF-03	RLCFF-03
RL	RLCH2-08	RLCH2-08
RL	RLESG-01	RLESG-01, RLESG-08
RL	RLEXX-01	RLEXX-01
RL	RLGEV-01	RLGEV-01, RLGEV-08
RL	RLIAEA-01	RLIAEA-01
RL	RLMLB-01	RLMLB-01
RL	RLMLL-01	RLMLL-01
RL	RLPFP-01	RLPFP-01, RLPFP-08
RL	RLPFP-03	RLPFP-03

Table E-2. Crosswalk of 2006 to 2007 Waste Streams
Continued

Site Code	2006 Waste Stream	2007 Waste Stream(s)
RL	RLPFP-04	RLPFP-04
RL	RLPFP-05	<i>Waste stream removed. All waste shipped to WIPP.</i>
RL	RLPRC-01	RLPRC-01
RL	RLPURX-01	RLPURX-01
RL	RLPURX-05	<i>Waste stream removed. All waste shipped to WIPP.</i>
RL	RLPURX-07	RLPURX-07
RL	RLRFET-01	RLRFET-01
RL	RLSWO-01	RLSWO-01
RL	RLSWO-08	RLSWO-08
RL	RLWAR-01	RLWAR-01, RLWAR-03
RL	RLWTP-08	RLWTP-08
RP	RP-TFC001	RP-TFC001
RP	RP-TFC002	RP-TFC002
RP	RP-TFC003	RP-TFC003
RP	RP-W013	RP-W013
RP	RP-W016	RP-W016
RP	RP-W754	RP-W754
RP	RP-W755	RP-W755
SA	SA-T001	SA-T001
SA	SA-W134	SA-W134
SA	SA-W134M	SA-W134M
SA	SA-W135	SA-W135
SA	SA-W136	SA-W136
SP	SP-T001	SP-T001, SP-T002
SR	SR-BCLCH-MT01	SR-BCLCH-MT01
SR	SR-BCLRH-MT01	SR-BCLRH-MT01
SR	SR-BCLRH-T001	SR-BCLRH-T001
SR	SR-BCLRH-T002	SR-BCLRH-T002
SR	SR-BCLRH-T003	SR-BCLRH-T003
SR	SR-BCLRH-T004	SR-BCLRH-T004
SR	SR-BCLRH-T005	SR-BCLRH-T005
SR	SR-BCLRH-T006	SR-BCLRH-T006
SR	SR-BCLRH-T007	SR-BCLRH-T007
SR	SR-BCLRH-T008	SR-BCLRH-T008
SR	SR-BCLRH-T009	SR-BCLRH-T009
SR	SR-BCLRH-T010	SR-BCLRH-T010
SR	SR-BCLRH-T011	SR-BCLRH-T011
SR	SR-T001-221H-HEPA	SR-T001-221H-HEPA
SR	SR-T001-773A-CLAS	SR-T001-773A-CLAS
SR	SR-T001-WSB-1	SR-T001-WSB-1
SR	SR-T001-WSB-3	SR-T001-WSB-3
SR	SR-T003-773A-HET	SR-T003-773A-HET
SR	SR-W026-221F-HEPA	SR-W026-221F-HEPA
SR	SR-W026-221F-HET	SR-W026-221F-HET
SR	SR-W026-221F-HOM	SR-W026-221F-HOM

Table E-2. Crosswalk of 2006 to 2007 Waste Streams
Continued

Site Code	2006 Waste Stream	2007 Waste Stream(s)
SR	SR-W026-772F-HET	SR-W026-772F-HET
SR	SR-W026-MFFF-1	SR-W026-MFFF-1
SR	SR-W026-PDCF-1	SR-W026-PDCF-1
SR	SR-W026-WSB-2	SR-W026-WSB-2
SR	SR-W027-221F-HET	SR-W027-221F-HET, SR-W027-221F-HOM
SR	SR-W027-221H-HEPA	SR-W027-221H-HEPA
SR	SR-W027-221H-HET-A	SR-W027-221H-HET, SR-W027-221H-HET-RH, SR-W027-221H-HOM
SR	SR-W027-221H-HET-B	SR-W027-221H-HET-B
SR	SR-W027-235F-HET	SR-W027-235F-HET
SR	SR-W027-235F-HOMO	SR-W027-235F-HOMO
SR	SR-W027-773A-HET	SR-W027-773A-HET
SR	SR-W027-999-AGNS-HET	SR-W027-999-AGNS-HET
SR	SR-W027-999-AGNS-HOM	SR-W027-999-AGNS-HOM
SR	SR-W027-999-LASL-HET	SR-W027-999-LASL-HET
SR	SR-W027-999-LASL-HOM	SR-W027-999-LASL-HOM
SR	SR-W027-999-MD-HET	SR-W027-999-MD-HET
SR	SR-W027-999-MD-HOM-A	SR-W027-999-MD-HOM-A
SR	SR-W027-999-MD-HOM-B	SR-W027-999-MD-HOM-B
SR	SR-W027-999-MD-HOM-C	SR-W027-999-MD-HOM-C
SR	SR-W027-999-MD-SOIL	SR-W027-999-MD-SOIL
SR	SR-W027-HBL-Box-A	SR-W027-HBL-Box-A
SR	SR-W027-HBL-Box-B	SR-W027-HBL-Box-B
SR	SR-W027-SRSG-HET	SR-SWMF-HET-A, SR-W027-SRSG-HET
SR	SR-W027-SRSG-HET-RH	SR-SWMF-HET-RH, SR-W027-SRSG-HET-RH
SR	SR-W027-SRSG-HOM	SR-W027-SRSG-HOM
SR	SR-W027-SRSG-SOIL	SR-SWMF-SOIL
VN	VN-CHT001	VN-CHT001
VN	VN-RHT001	VN-RHT001
WV	WV-M005	WV-T006a, WV-T006b, WV-W024a, WV-W024b
WV	WV-M007	WV-T006a, WV-T006b
WV	WV-M008	WV-M008
WV	WV-M010	WV-M010a, WV-M010b
WV	WV-M013	WV-M013
WV	WV-M015	WV-W024a, WV-W024b
WV	WV-T001	WV-T004, WV-T006a, WV-T006b, WV-W024a, WV-W024b
WV	WV-T004	WV-T004
WV	WV-T006	WV-T006a, WV-T006b
WV	WV-T009	WV-T006a, WV-T006b, WV-W024a, WV-W024b
WV	WV-T011	WV-T006a, WV-T006b
WV	WV-T014	WV-T006a, WV-T006b
WV	WV-T016	WV-W024a, WV-W024b
WV	WV-T017	WV-T017a, WV-T017b
WV	WV-T018a	WV-T006a, WV-T006b
WV	WV-T018b	WV-T006a, WV-T006b

Table E-2. Crosswalk of 2006 to 2007 Waste Streams
Continued

Site Code	2006 Waste Stream	2007 Waste Stream(s)
WV	WV-T019	WV-T006a, WV-T006b
WV	WV-T020	WV-T006a, WV-T006b
WV	WV-T021	WV-T006a, WV-T006b
WV	WV-W024	WV-W024a, WV-W024b
WV	WV-Z001	WV-Z001

Data Source: CID Data Version D.7.00, LANL-CO 2008a